FEEDSTUFFS

The Weekly Newspaper for the Feed Industry

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Senate Unit Acts On Grain, Other Farm Provisions

By JOHN CIPPERLY
Feedstuffs Washington Correspondent

WASHINGTON—At renewed Senate Agriculture Committee sessions on the administration's omnibus farm bill, the committee this week agreed to a one-year extension of the feed grain bill without major change. But in view of the existing drouth hazard, the group inserted language which would permit cancellation of the program if seen advisable.

The committee also agreed to a one-year wheat bill as passed by the House committee. This provides on a mandatory basis a 10% cut in acreage and payment for additional voluntary cutbacks up to 30%.

In connection with the controversial recommendation of USDA to give the secretary marketing agreement and order controls over farm commodities, the Senate committee approved a provision which removed

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CCC Grain Held For Emergency Use

By JOHN CIPPERLY
Feedstuffs Washington Correspondent

WASHINGTON — This week the U.S. Department of Agriculture halted all sales of its stocks of barley, oats and corn held in the drouth areas of the Northwest for any uses other than emergency feeding by stricken farmers in those states.

This means that Commodity Credit Corp.-owned stocks of barley and oats in these states are no longer available for redemption of certificates issued under the payment-in-kind export program, for sales under the CCC credit program or for barter exchanges. Sales from CCC bins in the four-state area of Montana, Minnesota, North and South

(Turn to GRAIN, page 8)

Advocates Exchange Of Government Grain For Poultry Products

CHICAGO—Poultry industry leaders are continuing to seek a program —under the government's Food for Peace plan—in which the government would buy poultry products in exchange for U.S. surplus grain.

This was pointed out by Harold M. Williams, president of the Institute of American Poultry Industries, Chicago, following a meeting of the Food for Peace Council in Washington.

Mr. Williams and W. E. Glennon, president of the American Feed Manufacturers Assn., were among members of the Food for Peace Council who met with President Kennedy and others.

Mr. Williams said that officials of the institute have analyzed opportunities that lie ahead for the poultry and egg industry in providing low-cost, high quality protein food for the Food for Peace program.

"Surplus feed grains in the U.S.," he said, "can readily be converted into poultry and egg products, rich in

(Turn to EXCHANGE, page 91)

FEEDSTUFFS *Features This Week*

LIVESTOCK—The importance of a feed firm's assistance in livestock production development is told on **page 18.** And on **page 26** is presented a Feedstuffs survey report on what the feed industry thinks of SPF swine.

ON-FARM MIXING—How an Ohio feed man has challenged on-the-farm mixing is described on **page 22.**

PLANT FEASIBILITY—More about feed mill planning as outlined at Kansas State University workshop appears on **page 64.**

CATTLE FEEDING—The influence of rations and feeding on beef quality is analyzed on **page 72.**

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Galvin Agrees With Forecasts of More Soybeans, Less Corn

By F. C. BISSON
Feedstuffs Special Correspondent

CHICAGO—The long-awaited July estimates on corn, oats, soybeans and wheat production by C. M. Galvin, internationally known crop expert and statistician, contain some figures which under other circumstances

(Turn to GALVIN, page 8)

Walnut Grove's Net Earnings Tripled

ATLANTIC, IOWA — Earnings of Walnut Grove Products Co., Inc., for the first six months of the 1961 fiscal year soared 219% over net earnings for the same period a year before on sales that were up 42%, to an all-time record six-month figure.

J. J. O'Connor, president of the feed manufacturing firm, said that net consolidated sales for the first six months, ending May 31, were $12,437,277, compared to $8,763,022 for the first six months of 1960. He told stockholders that net earnings after taxes for the period totalled $771,354 as compared with earnings of $241,-

(Turn to EARNINGS, page 87)

Chairman Announces Themes of Marketing Seminar Sessions

CHICAGO—The effects of a rapidly changing agri-business on feed marketing, elements of selecting, training and deployment of sales manpower, and techniques of becoming a better sales manager are themes of three program sessions constituting the third annual Marketing Seminar to be conducted by the Sales Executives Council of American Feed Manufacturers Assn. Sept. 20-21 in Chicago.

The announcement was made by E. C. Fuller, seminar program chairman and executive vice president,

(Turn to SEMINAR, page 87)

Economists Comment On Price Prospects For Livestock, Poultry

Here are some of the current comments some midwestern agricultural college and university economists have to make about livestock, poultry and egg prices:

—Before the year is over, most businesses will be operating near or above pre-"recession" levels. This improved business outlook is expected to help demand for meat, especial-

(Turn to PRICES, page 91)

Elevator, Mill Managers Look at 1966

By EMMET J. HOFFMAN
Feedstuffs Staff

AMES, IOWA — Twenty managers of country elevators, feed mills and farm supply businesses met at Iowa State University recently for a two-day workshop to "look at 1966" and discuss how to prepare for it.

The managers and workshop faculty considered several points of importance in both nearby and longer range planning — such things as changes in services and facilities, return on investment, costs, financing and related lines of merchandise.

The "faculty" for the workshop was drawn from Iowa State and Northwestern universities and experienced managers.

Conclusions on many points were definite; others were in the nature of warnings. Here are some of the conclusions reached at the workshop:

—Retail dealers of feed, fertilizer and related farm supplies have reached the point where they can

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Soybean Oil Meal Price Up $4 to $5

By F. C. BISSON
Feedstuffs Special Correspondent

CHICAGO — Cash soybean meal prices moved about in a nervous and erratic manner this week. At times it was actually leading the raw commodity and on other occasions it was back to the tail being wagged by the dog.

Soybean meal moved $4 to $5 high-

(Turn to BEAN MEAL, page 8)

Rail Rates Cut On Grain Hauls Into Southeast

WASHINGTON — New, lower freight rates on grain shipped from midwestern markets into the Southeast—to become effective no later than Aug. 15—have been announced by Southern Railway System.

Southern said the new rates, which have been filed with the Southern Freight Assn., Atlanta, will apply to the principal consuming points on the railroad's lines from the important shipping points of St. Louis, East St. Louis, Evansville, Ind., Louisville, Cincinnati and Memphis.

Substantial Reductions

Substantial reductions under existing rates are represented. For example, the present rate from St. Louis to Gainesville, Ga., is $10.50 ton. The new rate will be $3.97 per net ton in lots of 1,800 tons; $4.07 in lots of 900 tons, and $4.17 in lots of 450 tons.

The rate reductions were announced following the tie-up of shipping on the Tennessee caused by the collapse of a lock at Wheeler Dam,

(Turn to RATE CUT, page 91)

Workshop Planned For Operators of Small Feed Mills

KANSAS CITY—Emphasis will be on "how to do it" at the Small Mill Workshop, to be held Sept. 14 at the Continental Hotel in Kansas City.

"The program for the workshop is aimed at the operator and manager of the small and custom mill," according to E. R. McCollester, Consumers Cooperative Assn., Kansas City, and Phil Wake, J. H. Wake Feed Mill, Oskaloosa, Iowa, co-chairmen of the one-day program sponsored by Feed Production School, Inc.

The Workshop will follow the regular Production School, which will be presented Sept. 11-13 at the Continental Hotel also.

With the trend toward more small mills, usually on a custom-mix basis, serving nearby areas, the workshop is expected to be a particularly timely

(Turn to WORKSHOP, page 91)

South's Broiler Prices Slip 1c

NEW YORK—Prices paid southern broiler producers slipped back to 12¢ lb. this week—a decline of about 1¢—following a day of unsettled trading at the beginning of the June 29-July 5 U.S. Department of Agriculture market reporting period.

In Delmarva, however, prices held unusually steady. Most sales were reported to be in a range of 13.9-14.2¢ July 5.

At the end of the same reporting period, the nation's egg markets were in a firm position. Prices ranged from 1-3¢ higher on large to as much as 3¢ higher on mediums and up to 3½¢ higher on smalls.

Turkey prices remained generally unchanged during the week.

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ABC AUDITED PAID CIRCULATION — NBP

The regional circulation of this issue is concentrated in the northeastern states

Top of the Hopper

SOME VERY ENCOURAGING results from its new retailer advertising service are reported by the National Broiler Council. "Thanks for your help in trying to get fryers out of being a price item," the merchandising manager of a chain operating 140 stores told NBC. A great deal of mail and numerous phone calls and telegrams from other retail executives expressed similar appreciation, says Frank Frazier, NBC executive vice president. One retailer, representing over 500 stores, sent a bulletin to his store managers describing the new service and urged use of this material which would "stimulate more interest for better profits instead of selling for price."

Another chain representative (an advertising director) told NBC that the newspaper mat-service, needed to illustrate broilers in appetizing ways and hard to come by until the NBC started offering the service, "promises a solution to a pressing advertising problem."

Mr. Frazier says that information coming back from retailers not only is most gratifying, but it will be useful in planning additional merchandising aids to help move broilers more profitably.

It's beginning to sound like not all of the grocers are interested in giving chicken away and making it up on the charcoal and barbecue sauce.

RESEARCHERS HAVE THEIR PROBLEMS. In addition to possible criticism from colleagues and others in their own fields, they can run into an aroused public. A poultry nutrition researcher says that as a result of a report in the public press on one of his studies, "I can say truthfully that I have been threatened, and that I am also being prayed for. Vegetarians and food faddists have not taken this lightly."

HERE ARE A COUPLE of swine programs which may be of interest. An eastern feed dealer is planning to acquire quality breeding stock and then lease the breeding stock out to farmers who will produce feeder pigs for the firm. The feed dealer will finish these feeder pigs for market in the firm's hog finishing unit.

A midwestern dealer is promoting meat-type hogs on an extensive scale, and arrangements have been made to have a premium market available. To get production of meat-type hogs started in its area, the feed firm bought certified gilts and a certified boar. These animals were sold to top producers in the area, and arrangements were made with these producers to have certified gilts returned to the dealer for use in building up other herds.

THE U.S. ISN'T THE ONLY place with poultry industry problems. Mexico, in addition to being plagued by egg prices below the cost of production (a complex problem not entirely the result of over-production), is facing a serious challenge caused by an outbreak of laryngotracheitis in the Mexico City area. The government decided to institute a slaughter and quarantine program, rather than attempt control by accepted vaccination procedures. This created an upheaval in production and marketing, and it reached over into broiler operations because of area quarantine effects. As a result, poultry meat prices as well as egg prices have fallen, and both producers and feed manufacturers have been experiencing some heavy losses. Some observers say that while the final outcome is not clear, it may be that the survivors will be those who can weather the financial drain because of backing other than past profits on poultry. They say that commercial production and integration may receive greater impetus than normal circumstances would bring.

THIS LITTLE COURTROOM DRAMA was recalled the other day by a veteran feed man when conversation got around to feed company problems

(Turn to **TOP OF THE HOPPER**, page 93)

How's Business?

AN EVERY WEEK REVIEW OF FORMULA FEED BUSINESS VOLUME, INCLUDING PRICE, SUPPLY AND DEMAND TRENDS

Despite the July 4 holiday, feed volume for the week is running at about the same level as a week earlier. Some manufacturers said that their plants will put in some overtime to make up for the holiday. However, there were also those who said no extra work would be needed to keep up with demand.

Turkey feed volume is gaining momentum as the birds grow. Hog feeds are moving well in their areas and the prices of market hogs may encourage increases in hog numbers.

Price lists are expected to advance up to about $2 due to the rise in price of soybean oil meal.

The wholesale feedstuff price index advanced 1.2 points this week to 82.6 and compares with 73.4 at the same time a year ago. The feed-grain ratio is up 1.4 points to 64.6 and compares with 66.8 of a year earlier.

The hog-corn ratio was 15.9 this week compared with 15.0 last week and 14.7 a year earlier. (Major feed market review and ingredient quotations appear on pages 88-90.)

Northwest

Feed men generally report that July is off to a good start despite the loss of one day's work due to the July 4 holiday. Volume is about on the level of a week ago. Some manufacturers say that the holiday will cause some overtime work Saturday while others said they would not have to work overtime to make up for lost time.

One manufacturer reported that his firm plans to market a new ration for cattle in the drouth hit Northwest in the near future.

Turkey feed volume is growing just as the turkeys grow. Hog feed is also moving well.

Price lists are expected to show $1 to $2 increases reflecting the advance of soybean oil meal.

Southwest

Formula feed business in the Southwest continues at substantially the same level as last week in spite of the holiday. Some mills found it necessary to operate July 4 to keep up with commitments. Most mills in the area, however, are running on a five day basis.

Turkey feed is providing the big portion of the volume and, while the peak volume of this line has not been reached, it has been indicated that it may be reached this month.

Pasture conditions in most of this area are excellent and tend to hold down cattle and dairy business.

Hog feed sales are reported from good to excellent with mixers still shipping a satisfactory amount of little pig feeds although some trade sources indicate volume in this line is falling off.

The pace of feed business has held up surprisingly well during the wheat harvest and, with the harvest in the area pretty well completed, it is hoped some pickup might occur.

Northeast

Feed manufacturers closed out the first half of this year with sales gains averaging 4%. One mixer reported a rise of 8%.

Sales in the latest week maintained the pace of the previous week's upturn. Complete dairy feeds were the leaders among dairy items, which continue to show surprisingly good tonnage. Egg mashes and growing mashes were well taken, and broiler feeds are starting to come back a little.

Broiler prices edged up and could work into firmer ground if the weather would warm up enough to encourage more cook-outs. Egg prices held about steady.

The wheat crop in the western New York area has headed out nicely and grass and hay have done well. But one spokesman said the growth of corn and oats "is depressing" and the crops appear to be a "washout." This area had prolonged spring rains and cool weather right up to the present time. On July 5 the temperature skidded to as low as 39°. The western New York area is not self-sufficient in producing its feed needs, and any setback to the crops means more costly replacements.

Running time of some formula feed manufacturers was cut by the holiday to 36 hours from 40 hours in the previous period.

Southeast

Formula feed business in the Southeast continues to be reported on the slow side with the exception of broiler feeds which continue to move in large tonnages only because of the greater number of broilers on feed. Mills report running time as normal.

Prices paid for broilers dropped 1¢ per pound this week to 12¢ lb., f.o.b. the farm, with good operators still operating at a loss.

Central States

Due to the July 4 holiday and numerous concerns making it a long weekend holiday, trade had some of the characteristics of the week between Christmas and New Year's Day. Running time, naturally, was somewhat curtailed.

Backlogs of orders remain moderate with the in-flow of orders just about keeping pace with the amount of mixed feed that is being produced.

June 30 and July 3 and 5 prices for hogs in Chicago made tops of $19 cwt., the best price since last February. This should be reflected in steady improvement in the demand for hog feeds. Nothing has changed in the broiler feed situation. Growing feeds and dairy feeds are also moving at an even pace.

Ohio Valley

Sales of formula feeds increased slightly during the last week, but manufacturers do not expect any rush of business in the coming weeks when valley farmers will become increasingly busy with harvesting.

During the period immediately ahead, it is to be expected that feed retailers' inventories will continue in tonnages sufficient only for immediate requirements, with no build-up likely to develop until after summer crop harvesting activities have been completed. Also contributing to this situation is the present decline in egg and poultry prices.

South Central

Formula feed outgo has been at a slower pace this week, but there are reasons. The decrease in sales is at-

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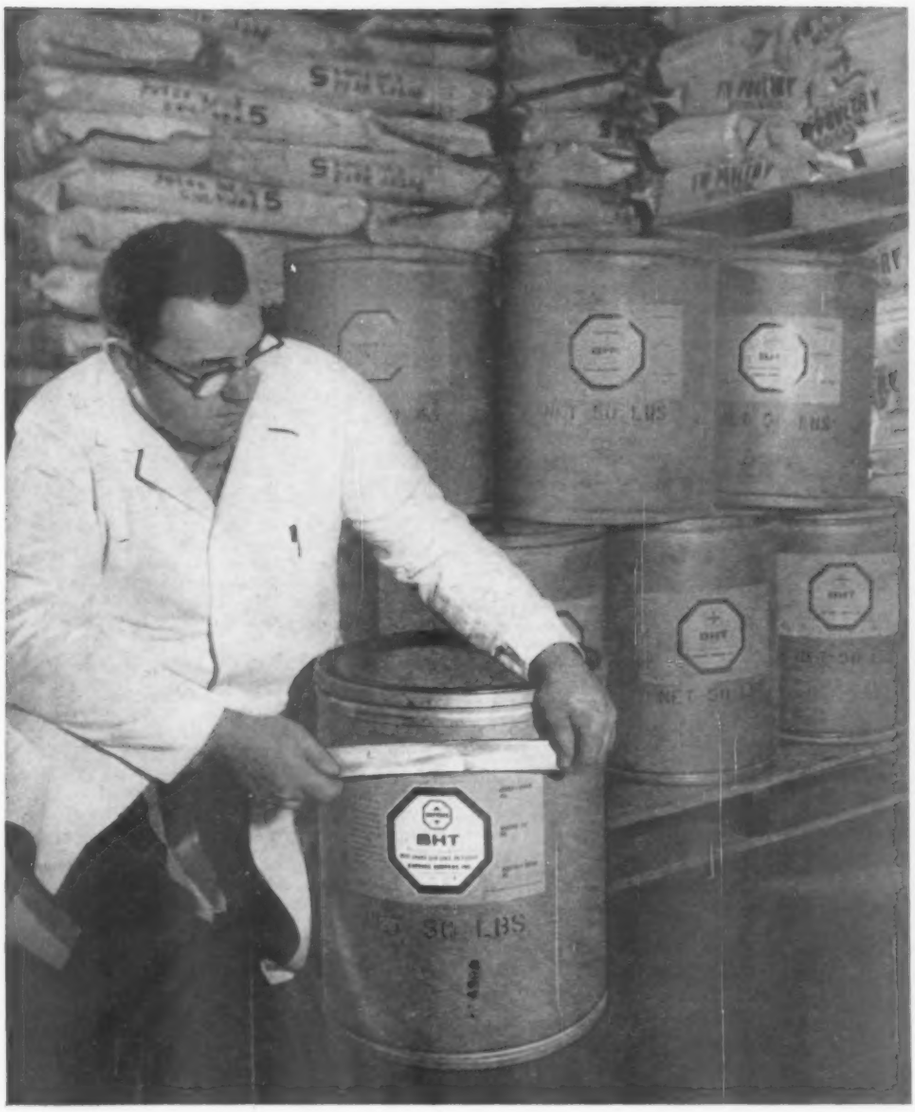

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May Broiler Credit In South Up from Month, Year Earlier

ATLANTA — The July 3 broiler production credit report of the Federal Reserve Bank of Atlanta indicates that trade credit outstanding at the end of May at feed manufacturing plants participating in its survey was 12% greater than a year earlier and 4% above a month earlier.

The bank's research department said an increase in collections during the month was marked because dealers and producers stepped up their repayments. Collections amounted to 16% more than a year before and 22% more than in April.

Although trade credit for broiler production increased in May for the fourth consecutive month, the rate of increase was smaller than in the three previous months, the bank's survey indicated. Despite the reduction in the monthly rate of gain, the rate of change from a year ago continued to rise.

Loans outstanding at selected banks in the Sixth Federal Reserve District for broiler production increased in May from both a month earlier and a year earlier. Loan repayments increased, also, but not enough to offset the relatively large increase in new loans made during the month.

Trade credit outstanding for broilers to feed or other dealers amounted to an increase of 7% in the category of open book accounts, comparing May, 1960, with May, 1961. For accounts secured by chattels and mortgages the increase was 3%. Collections in the same categories increased 4 and 5%, respectively, from May, 1960, to May, 1961.

Percentages of increases in total outstandings of trade credit to producers were much greater. From May of last year to May of this year open book accounts gained 86% and for accounts secured by chattels and mortgages the increase was 125%.

Outstandings of bank credit for broiler production at the end of May were up 13% from the end of April and 3% from a year earlier. New loans through dealers and direct to producers during May amounted to $1,806,000. This was an increase of 29% from April and 167% from May of last year. Repayments in May came to $1,535,000, a gain of 3% from a month earlier and an increase of 51% from a year earlier.

Construction Begins On Oregon Mill

ONTARIO, ORE. — Construction began last month on the new Ranch-Way feed mill in Ontario, reports David Page, general manager, Ranch-Way division, Colorado Milling & Elevator Co., Denver.

The modern push-button feed plant will contain the latest developments in commercial feed plant design and equipment and will offer complete bulk feed facilities to dealers, farmers and ranchers in the Ontario, Boise Valley and surrounding areas for the first time, Mr. Page stated.

The Ranch-Way plant here will continue to operate as Ontario Elevator until the new facilities are completed, he explained.

Harold Stoll will be plant manager, assisted by Ivan Gettman. Plant superintendent will be selected later.

The structure will have complete bulk ingredient receiving facilities by either truck or rail. Bin capacities for ingredients and finished pellets and complete feeds will be 860 tons, plus 55,000 bu. of grain storage. The 125 h.p. pellet mill will produce 100 tons of pelleted feed in eight hours, Mr. Page explained.

Also 120 tons of rolled and cracked grains mixed with pellets and molasses can be produced.

PLAQUE PRESENTED — Harry Truax, who has just retired as president of the board of directors of the Farm Bureau Milling Co. and as head of the feed and poultry department of the Indiana Farm Bureau Co-op, is shown being presented with a plaque citing him as "Feed Man Exceptional." Making the presentation is Maynard Brownlee, who succeeded Mr. Truax as president of the board of Farm Bureau Milling Co.

Harry Truax Retires From Farm Bureau; Successors Named

HAMMOND, IND.—The month of June saw two retirement dates for Harry Truax, well known feed man. He retired from positions as president of the Farm Bureau Milling Co., Hammond, and as head of the feed and poultry department of Indiana Farm Bureau Cooperative Assn., Inc., Indianapolis.

Farm Bureau Milling is the production unit for feeds distributed by Indiana Farm Bureau Co-op, Wisconsin Farmco Service Cooperative, Madison, and Farm Bureau Services, Inc., Lansing, Mich.

As a part of the retirement ceremonies, Mr. Truax was presented with a plaque reading: "1934-1961, Harry Truax, Feed Man Exceptional, In appreciation of 27 years of dedicated service to the livestock and poultry farmers in Indiana, Michigan and Wisconsin as board member, executive secretary and president of the Farm Bureau Milling Co."

Mr. Truax had been head of the feed department of Indiana Farm Bureau Co-op for 24 of his 27 years with the cooperative.

Succeeding Mr. Truax as president of the board of directors of the Farm Bureau Milling Co. is Maynard Brownlee, Farm Bureau Services, Inc., Lansing, Mich. Ivan Moore has been named to succeed Mr. Truax as head of the feed and poultry department of Indiana Farm Bureau Co-op. Mr. Moore is also vice president of Farm Bureau Milling Co.

Mr. Truax is a director and past vice chairman of the American Feed Manufacturers Assn. and is the only feed man from a cooperative to have attained the position of vice chairman of that group, the retirement announcement said. Along with his AFMA activities, Mr. Truax' "retirement" will include continuation of the following duties: President, Indiana State Egg Board; president, Farmers State Bank, Eminence, Ind., and board member, Hoosier Veterinary Lab, Inc., Thorntown, Ind.

Mr. Truax is a native of Stilesville, Ind., graduated from Eminence (Ind.) High School and graduated from Ohio State University. For several years during the early 1920's he

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New Alfalfa Plant

SWINK, COLO.—G. W. Noel, owner of Western Alfalfa Products, Inc., hopes to have the firm's new Swink plant in operation soon.

The firm purchased the Holly Sugar Corp. buildings here after a fire destroyed the original plant at the former LaJunta air base.

A new fireproof building is under construction to house the milling equipment purchased for the new location.

Jury Rules for Both Feed Firm, Producer

MT. VERNON, WASH. — After eight days of testimony in the trial of the Carnation Co. and its Albers Milling Co., versus Richard Wick and his wife, Marion, a jury awarded more than $81,000 in combined damages to participants of the suit and countersuit.

The feed company had brought suit against the poultry growers for unpaid feed bills. In a countersuit the Wicks charged that feed supplied them was injurious to their flock, and asked $74,000 damages for alleged loss of production.

The major question was whether or not the feed contained nicarbazin, a coccidiostat intended for fryers but not laying hens. Experts testified on the point from several directions. One technician was flown twice from New Jersey during the course of the trial.

The jury ruled that the feed did not contain nicarbazin, but judging on other evidence it ruled that the Wicks should be allowed $15,385.70 damages for his losses. At the same time, the jury decided the feed company should receive payment for feed supplied amounting to $65,885.70.

Young Chicken Condemnations Off

WASHINGTON — May condemnations of young chicken carcasses by federal inspectors declined 25% from the level of a year earlier, according to figures announced by the U.S. Department of Agriculture.

Condemnations of mature chickens were also off from a year earlier levels, according to the figures. However, all other classifications of poultry showed increases in condemnations over a year ago. Those classifications were: Fryer-roasters, young turkeys, old turkeys and ducks.

Post-mortem condemnations of young chickens during the month of May were at the rate of 1.89% compared with 2.51% for a year before. Total condemnation rate was 1.88% this year compared with 2.39% for May of 1960.

Airsacculitis continued to be the biggest cause of condemnations, according to the USDA figures. It accounted for 1,487,932 of the total of 3,171,675 condemnations.

Septicemia was next with 667,340 condemnations. The other major causes were leucosis with 175,351 and inflammatory with 149,995.

Condemnation rates for young chickens by states showed a wide range. Oregon retained its position of having the highest rate, 3.26%. Iowa was the lowest with .30%. Regional rates of condemnations also varied widely with the West having the highest rate, 2.37% and the East North Central having the lowest rate of 1.45%.

Percentages of post-mortem condemnations in other classes of poultry, with this year's figure first and last year's figure following, are: Mature chickens, 1.92, 2.51; fryer-roaster turkeys, 1.09, .77; young turkeys, 1.37, .99; old turkeys, 2.22, 1.54, and ducks, 1.86, 1.27.

Joins Real Estate Firm

KANSAS CITY — Dean Scholes, formerly sales manager for the Archer-Daniels-Midland Co. equipment division, Kansas City, has joined the sales staff of M. L. Brewer, Kansas City real estate firm.

EGG GROUP FORMED

YAKIMA, WASH.—Formal organization of the Washington Egg Producers Assn. was accomplished here recently. Some 65 egg producers representing four local districts east and west of the mountains attended. Washington has about 4.5 million laying hens and some 600 commercial egg producers.

CAPITAL COMMENT

By John Cipperly
Feedstuffs Washington Correspondent

Feed Grain Base

WASHINGTON — "Thar is water in them thar figgers" on the payoff base for corn and grain sorghums in the government's feed grain program.

An old dowser friend used to contend that water is where you find it, and all you need is a forked twig of a nut tree. So one might contend that the dowser theory is merely being projected as seen after a study of the first report to Congress by the U.S. Department of Agriculture in connection with the feed grain program.

The feed grain law as passed required that payments made to cooperators in the acreage reduction program for corn and grain sorghums would be calculated on reductions for 1961 crops from the 1959-60 base period.

For the 1959-60 crop years, a generous estimate based on USDA official crop reports shows an average of 83.6 million acres. However, in reporting to Congress USDA chief Orville Freeman said that the base acreage he used was 87,047,000 acres, or an increase of about 5% above the official USDA estimates for the base period. Not a huge increase to be sure. But it is 2½ times that permitted when Ezra Taft Benson had to deal in vague data for which there were no official figures as to crop allotments by farms. To be sure, Mr. Freeman leans to the side of generosity, particularly for the politically antagonistic Corn Belt. But there is water in the corn figures in the report to Congress.

When it came to calculating the total base for grain sorghum acreage in calculating payments to cooperators—again a crop for which there are no adequate farm acreage allotment data—the Secretary of Agriculture approved a 20% margin for error, or an allowance for optimistic reports by farmers to USDA when asked to estimate their 1959-60 average acreages for the crop.

It looks as though officials first tried the corn figure, found it good, and then resolved to do better by the Texas-Colorado-California politicians and upped the ante to 20%.

It appears that (1) the secretary may have decided that grain sorghum farmers had a better mental image of their acreage in the base period, or (2) he felt that they leaned far over backward to see that not one farthing was to come their way at the expense of Uncle Sam, or (3) it could be speculated that Mr. Freeman ran down the list of members who had or were close to sorghum acreage and their political nerves were not to be sparked.

NEW SWISHER MILLS

DANVILLE, ILL. — Three independent feed mills have recently joined the Swisher franchise system, according to Robert Freeman, sales manager of the Swisher Feed Division of the William Davies Co., Inc., Danville, Ill. The new Swisher Feed Service mills, which use super concentrates with local grain and soybean meal to make feeds and concentrates, are S. W. Hayes Hatcheries, Bloomington, Ill.; Havana (Ill.) Milling Co., and Manilla (Ind.) Grain Co.

MANEY BROS. MILL & ELEV. CO.
Minneapolis, Minnesota
Distributors in the Upper Midwest States for
SMALL'S DEHYDRATED ALFALFA MEAL

"Left holding the bag"

. . . . . is to be left with expectations, but nothing to show for them. The expression comes from an old prank, known as the "snipe hunt." A new boy in a neighborhood is taken into the woods at night and told to wait in one spot, with a flashlight and bag, while the others go into the brush and scare up some "snipe." Sooner or later, the new boy discovers he has been left alone in a strange place, "holding the bag."

You're never left "holding the bag" when you purchase Small's Dehydrated Alfalfa, for it lives up to your expectations every time. Laboratory analysis assures that each bag of Small's will equal or exceed your specifications . . . and a certificate of analysis guarantees it. Absolute dependability is one of the chief reasons why Small's Dehydrated Alfalfa is the first choice of discriminating feed buyers.

ARCHER-DANIELS-MIDLAND CO.

ALFALFA DIVISION

Box 356 **Kansas City, Mo.**

FOR FEEDS WITH A FUTURE

Small's dehydrated alfalfa

Hows and Whys of California Turkey Integration Outlined

SACRAMENTO, CAL.—An industry-oriented, detailed definition and appraisal of integration in California's turkey production by a feed firm executive at the Western Poultry Congress answers questions like these: Why is integration becoming more prevalent in the state's turkey industry? What are some of the forms of integration? What are the latest innovations in use? And what changes or new ideas are likely to become a part of integrated production in the future?

This analysis of how and why integration figures in California's turkey industry comes from G. R. Fernley, manager of turkey production and marketing for the formula feed department of Sperry Operations, General Mills, Inc. His headquarters are at San Francisco.

THE WHYS OF INTEGRATION—Here's what he said about the whys of integration, including contract growing and contract egg production, in the talk he presented during the Western Poultry Congress at Sacramento June 20-22:

Money—"I suppose that the greatest single reason for integration could be explained in one word: Money—the lack of it for expansion purposes, survival or to buy a product. It is no longer possible to take a profit on each phase of a production program. Mrs. Housewife has refused to pay high prices for a product; and, therefore, a union of the various phases of production has become a must to keep the selling price competitive. This results in one low profit on the end product.

"Feed companies have been forced into more contract growing operations to maintain feed volume. This has resulted in management changes and the assumption of market responsibilities.

"The feed manufacturer used to make a ton of feed, sell it to the feed dealer at a profit, and the dealer in turn sold it to the grower at still another profit. A salesman was maintained in the field to sell feed.

"In a production program the profit of the feed dealer has been eliminated. The feed company now makes a ton of feed and converts it into pounds of meat. The feed salesman has been replaced by a specialist to oversee the production of these turkeys and to watch their flock health. His job is no longer sales, but it is service. The feed company produces and sells meat. Therefore, it is more interested in the market than ever before. The profit or loss it takes depends on the efficiency of its growing program and the market price of its product.

"Over-production is another cause of integration. This has resulted in money losses by many growers and consequently many feed companies.

"It used to be possible to get feed and poult financing, grocery money, a new car, etc. As more and more turkeys were grown, the market became less stable and financing became tighter. But then the hatchery was asked to carry all or part of the poult cost. More and more growers failed to pay off at the end of the growing season. Many were able to bail out due to an egg production program; this has kept many in the

(Turn to CALIFORNIA, page 92)

TEXAS EGG PROMOTION—**John White, Texas agricultural commissioner, looks on as Gov. Price Daniel signs an official memo recognizing July as "Golden Goodness of Texas High Quality Eggs" month in the state. Also obviously pleased is Texas' "Miss Golden Goodness," Margaret Bryan of Lexington. Margaret's apron and basket of appetizing hard-cooked eggs invite Texans to "Enjoy the Golden Goodness of Eggs" this summer.**

Mississippi Firm Plans Expanded Broiler Operation

GREENVILLE, MISS. — Despite the unfavorable price outlook, the Warren Produce Co. is planning to put down 2 million more broilers before the end of the year. The broilers will be on company-owned land in company houses in the Greenville vicinity.

"We must keep our processing plant at full capacity," said L. C. Bryant, owner. "At present we are having to ship in broilers from central Mississippi to keep everyone busy."

The company has a working agreement with The Quaker Oats Co. and the Flowood Corp. in producing and processing broilers. Warren Produce manufactures the feed in its mill according to Quaker Oats specification. Quaker Oats then sells the feed to the Flowood Corp., which owns hatcheries, breeder flocks and raises the broilers. At marketable size the broilers are picked up by the Warren Produce trucks and hauled to the processing plant at Greenville. After processing, they are distributed by the produce company to grocery stores in Mississippi, Louisiana and Arkansas. At present the company is using 10 delivery trucks for hauling the processed birds.

At present the companies have about 600,000 broilers on feed in this part of the state and plan to put down another 2 million.

"Complete Control Needed"

"With the broiler industry facing low prices periodically, we feel that complete control of the entire production is essential," said Mr. Bryant. "We plan to buy the land, put up houses and then hire a family to take care of each unit, which will be about 50,000 birds."

The family will be given living quarters on the farm, be paid a salary plus an incentive payment for

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Chairman of Iowa Milling Firm Dies

WATERLOO, IOWA—Carl G. Orsinger, chairman of the board, Waterloo (Iowa) Mills Co., died June 29 while working in his yard at home. A heart attack was said to have caused his death. He was 70 years old.

Mr. Orsinger retired from active business participation in 1959.

During his career he was vice president and director of the Vinton (Iowa) Farmers Supply Co., president of the Western Grain & Feed Assn. and director of the American Feed Manufacturers Assn.

Mr. Orsinger is survived by his wife and two daughters.

John Richardson in New Allied Mills Post

CHICAGO — John L. Richardson has been named public relations and promotion manager of Allied Mills, Inc., Chicago, it was announced by E. W. Lenz, president of the corporation.

John L. Richardson

In this newly created position, Mr. Richardson will be in charge of coordinating information disseminated by the company and responsible for the interpretation of company programs and activities to the public. He also will coordinate all company promotion programs and supervise sales of specialty products.

Born in Clayton, Ind., Mr. Richardson was graduated from Purdue University with a B.S. in animal husbandry and an M.S. in agricultural economics. He did additional postgraduate work in business administration at the University of Minnesota. Mr. Richardson joined Allied Mills in 1929 in the advertising department at Ft. Wayne, and had held the posts of assistant advertising manager, district sales manager, director of advertising and sales promotion, and director of marketing prior to his new appointment.

Western Canada Has 'Most Extensive' Drouth in History

WINNIPEG, MANITOBA — Western Canada is in the throes of what is described as its most extensive drouth in history with scorching temperatures its ally.

Many areas were more severely hit in the 1930's, but the area under punishment was much less than this year, according to Canadian authorities.

Today the drouth covers most of the southern half of Saskatchewan and Alberta as well as northeast Saskatchewan and all of Manitoba. Grazing lands have taken a severe beating and water for livestock over large areas of the west is scarce.

Grain crops have been equally hard hit, but in the severest drouth areas summer fallow crops are standing up well although a longtime average yield now seems remote. Crops on stubble and on second crop land range anywhere from complete failures to doubtful half crops.

In the more favorable areas of Alberta and Saskatchewan the picture is quite different. Surplus feed is available and may be sufficient to take care of feed requirements of the drouth areas of those provinces if careful feeding is exercised, it was pointed out. In Manitoba it is estimated that 2 million tons of feed is required. The estimated available supply is less than 500,000 tons and much of this is slough hay.

It was this picture of western Canada that brought the Federal Minister of Agriculture Alvin Hamilton to meet with the three prairie province ministers of agriculture here July 2.

The committee came up with a plan to hold cattle off the market and prevent a break in prices.

Cattle have moved to market in larger volume than a year ago at this time and prices have eased. U.S. buyers have taken advantage of the declining prices and the devaluation of the Canadian dollar, it was stated.

DIE IN MINNESOTA HEAT

WILLMAR, MINN. — The high temperatures here June 28 killed 500 turkeys, part of the flock at one of the Huisinga turkey farms near Willmar. Temperatures soared to 96° F., the highest since June 13, 1956, it was reported.

Program for 7th Technical Alfalfa Conference Told

ALBANY, CAL.—Several research subjects and a symposium on coumestrol will be presented when the seventh Technical Alfalfa Conference is held here July 27.

The event, being sponsored by the American Dehydrators Assn. and the Western Utilization Research and Development Division, Agricultural Research Service, U.S. Department of Agriculture, will be held at the Western Regional Research Laboratory here.

Topics and speakers on the program follow: "Progress in the Industry," J. W. Fielder, Dixon, Cal., president American Dehydrators Assn.; "The ADA Research Program," Joe Chrisman, Kansas City, executive vice president of the American Dehydrators Assn.; "The Status of Ethoxyquin," Roy C. Elrod, Kansas City, alfalfa division, W. J. Small Division of Archer-Daniels-Midland Co.; "Chick Growth Factors in Alfalfa," Dr. G. O. Kohler, chief, Field Crops Laboratory, Western Utilization Research and Development Division, Albany, Cal.; "Breeding Alfalfa for Disease and Insect Resistance," Dr. H. O. Graumann, chief, forage and ranch research branch, Crops Research Division, Beltsville, Md., and "Availability of Vitamin E in Alfalfa," P. H. Derse, director, Control Laboratory Operations, Wisconsin Alumni Research Foundation, Madison, Wis.

A special feature will be a symposium on coumestrol, introduced by Dr. Kohler. Topics and speakers will include: "Coumestrol Analysis," A. L. Livingston, Forage Investigations, Western Utilization Research and Development Division, Albany, Cal.; "Cultural Factors as Related to Coumestrol and Saponins in Alfalfa," Dr. C. H. Hanson, research leader, Alfalfa Investigations, Crops Research Division, Beltsville, Md.; "Estrogens and Dehydrated Alfalfa in Beef Cattle Feeding: Review of Five Years Work," Dr. John Matsushima, animal husbandry department, University of Nebraska, Lincoln; "Estrogens in Alfalfa as Related to Nitrogen Balance in Steers," Dr. C. J. Elam, Beef Cattle Research Branch, Animal Husbandry Research Division, Beltsville, Md., and "Review of Oregon Research on Estrogens and Forages in Sheep Feeding," Dr. J. E. Oldfield, dairy and animal husbandry department, Oregon State University, Corvallis, Ore.

FDA Announces Time Extension

WASHINGTON — The Food and Drug Administration has announced a time extension for obtaining safety clearances for food additives. The time was moved ahead 60 days, to Sept. 1, 1961.

When President Kennedy signed a new law on food additives in April, FDA said that previously granted or pending extensions would be continued in effect until July 1, 1961, to enable submittal of the necessary information and its evaluation by the agency regarding substances for which further extensions are believed warranted. This date is now changed to Sept. 1, 1961.

FDA said that it had a substantial number of requests for further extension of the effective date of the statute and that it would not be possible to accomplish the necessary thorough scientific review prior to July 1.

FDA pointed out that no extension has been or can be granted unless the substance involved can be shown to present no undue risk to the public health during the extension period.

Packer to Grow 3½ Million Birds

THOMASVILLE, GA.—Sunnyland Packing Co., Inc., Thomasville, and its allied industries have leased 250 acres of land from Thomasville and Thomas County as a site for a huge broiler growing center.

Sunnyland's project, which includes the construction of broiler houses on the former airport site, will employ about 150 persons and supply about 3½ million additional broilers a year for the packing company.

The operation also will open a market for about 500,000 bu. of corn a year, along with an outlet for such grain as soybeans, oats, milo, wheat and other farm products.

The Sunnyland firm will finance construction of its chicken ranch. The method of financing will be the selling of $500,000 worth of revenue certificates by the Payroll Development of Thomasville. The certificates will be amortized through annual lease-rental payments.

The chicken ranch is scheduled to be built this summer.

Sunnyland now buys about $60,000 worth of chickens a week, and only 3% of them from Thomas County producers. It is anticipated that production capabilities of the poultry farm will be doubled within the next five years.

Protein Blenders Report Sales Gain

IOWA CITY, IOWA—Sales of BP cattle feed showed an increase of 44.5% in May, 1961, over the same period in 1960, according to Lloyd T. Cashman, general sales manager for Protein Blenders, Inc., Iowa City.

Mr. Cashman also announced that hog feed sales showed an over-all gain of 23.6% for the first five-month period (January through May, 1961, over the same period in 1960). A gain of 93.6% in sales of BP calf starter during the five-month period as compared to the similar period in 1960 was attributed to a special sales and merchandising promotion.

Sales during March, April and May climbed 11% over the same three months a year ago. "Indications point toward a steady increase throughout the balance of the year due to additional sales personnel, the opening of new territories and merchandising promotions planned for the months ahead," Mr. Cashman stated.

Unionize Producers

PORTLAND, ORE.—First charter ever issued to a milk producers' local in any of the 11 western states was turned over here by the International Brotherhood of Teamsters.

Jurisdiction of the new local, No. 267, will be all of Oregon and 5½ Washington counties, according to Bill O'Connell, joint council representative of the teamsters union.

The charter will be presented to the milk producers by Ed Benjamin, Salem, president of the joint council of teamsters. Some 50 dairymen have signed up and there is a potential of more than 2,000 producers.

Following an organization meeting, union officials are expected to meet with distributors to negotiate a price for their milk.

INSPECTION BILL

RALEIGH, N.C.—A bill which would set up a system of poultry inspections in North Carolina has been introduced in the House of Representatives by Rep. Raymond Woodword. A similar bill has been introduced in the Senate by Sen. Henry G. Shelton. The measure is backed by L. Y. Ballentine, commissioner of agriculture, who proposes "on-the-line inspection" in all plants doing business in two or more counties.

Vermont Congressmen Ask Lower Rail Rates On Shipments of Corn

MONTPELIER, VT.—Vermont business firms have been asked by their state's delegation in Congress to demand lower rail rates for bulk corn shipments to Vermont feed manufacturers to offset a proposed rate decrease for similar shipments to two cities in Maine.

Sen. George D. Aiken (R., Vt.), chairman of the delegation, reported he had been informed that the Traffic Executive Assn. has approved plans for the Maine Central Railroad to apply to the Interstate Commerce Commission for a cut in rates on corn shipments to Portland and Augusta in Maine.

The Vermont delegation has sent a written protest to the association, declaring such a preferential rate for the Maine cities would be discriminatory against feed manufacturers in Vermont.

Sen. Aiken declared:

"This reduction, if allowed to go into effect without similar reduction for shipments to points in Vermont, would have serious effects on Vermont agriculture, Vermont industry, Vermont transportation and Vermont labor."

The proposed preferential rate for the Maine communities was brought to the attention of the Vermont members of Congress by James Mereness, vice president of Vermont Associated Industries.

Joining Sen. Aiken in the protest were Sen. Winston L. Prouty (R., Vt.), and Rep. Robert T. Stafford. The entire group urged Mr. Mereness and the VAI to fight for similar rate reduction for corn shipments to this state.

Swisher Test Farm Plans SPF Project

MAPLE, ONTARIO—Officials of William Davies Co., Inc., have announced that after 22 years, the registered herd of Yorkshire swine at the firm's Swisher Demonstration Farm is to be sold at auction July 21, here, to make way for a new project.

"Established in 1939 for test work with feeds and management programs, the herd has been upgraded over the years with the continuous introduction of some of the most outstanding blood lines from Europe," the firm states. The herd is to be dispersed to make way for an extensive new program of raising specific pathogen free hogs on a commercial basis, according to Davies and Swisher officials. Before such a program can be undertaken, all hogs must be cleared off the farm at least two months prior to receiving the SPF pigs, they said.

The new project at the Swisher Demonstration Farm will provide the first tests of this SPF program on a commercial scale in Canada, officials say. They commented that the primary reason for researching such a program is to help provide an answer to two of the most prevalent diseases in hogs in North America—atrophic rhinitis and virus pneumonia.

According to Davies and Swisher spokesmen, the SPF system is relatively new in Canada with only four sources doing this work.

Officials of the firms say that the sale of registered Yorkshires presently on the demonstration farm is expected to attract hog breeders from most of the Canadian provinces and from the U.S. They anticipate that the sale will be one of the largest ever held in Canada.

The sale will include 175 head of registered Yorkshires, as follows: 45 sows, 65 gilts, 45 open gilts and 24 boars. All have been personally selected for the sale by George R. Robson, farm manager. Sales catalogs can be secured by writing to Hayes Farms, Ltd., Box 490, Oakville, Ontario, Canada.

Panelists Roll Out Crystal Ball, See What's in Future for Poultry

By ROBERT H. BROWN
Feedstuffs Special Correspondent

MONTGOMERY, ALA.—In these troubled times of low prices, overproduction, condemnations, high taxes and international diplomatic tussles, what does the future hold—say five years from now—for the poultry business?

Four panelists, each an expert in his field, sat behind a table at the Alabama Poultry Industries Assn. convention, peered into the crystal ball and came up with some predictions that may answer that question. (Earlier reports from the convention appeared in Feedstuffs July 1, page 6.)

But, they said, don't rush down to the bank to borrow money on the strength of the guesses because, after all, they're nothing more than guesses.

For one thing, said K. K. Hale, Peterson Breeding Farm, Decatur, Ark., in five years one man may be handling 100,000 birds, thanks to housing and environmental control methods that have come along and will come along the next few years.

75% Processed Foods?

Another expert, Charles Owens, N. R. Beck Co., Russellville, Ark., came up with a guess that in five years from now it could very well be that 75% of the nation's poultry production would be in the form of processed foods in one form or another. This would be any stage from the raw onward.

An egg man, Dr. J. C. Huttar, director of poultry industry relations, Cooperative G.L.F. Marketing Service, Ithaca, N.Y., put forth a guess there would be more on-the-farm processing of eggs and more egg sheds within 100 miles of markets.

Heavier Broilers?

Broiler weights should increase, too, within the next five years. Dr. Fred Moultrie, research coordinator, Arbor Acres, Glastonbury, Conn., ventured the guess of about .4 lb. but he hastened to add this would in all probability be reflected in an earlier market age of about a week, rather than in weight.

As to feed conversion he said:

"We might expect about .05 lb. reduction annually or about .25 in a five-year period."

Egg production of broiler stocks, he said, might bring a maximum of 2 eggs gain per bird per year or about 10 eggs in 5 years.

From the floor he was asked what would be the difference between broilers and layers. His reply was they would probably be about the same. "This is considering improvement in the existing lines or cross combinations, and does not necessarily mean that new combinations may be developed that would slightly exceed this figure," he said.

Housing?

Then came the subject of housing in the next five years. "Tomorrow's dream house," Dr. Huttar said, "will be better ventilated and will have temperature control, light control for growing, improved humidity control, air changes, dust and micro-organism reducers and good insulation."

Raising by sexes could just possibly be on the increase in the next five years, Dr. Moultrie indicated.

"Auto-sexing would make it cheaper for the producer to grow his sexes separately which in turn would reduce the amount of variation within a given flock going to market," he said. "It has been noted by some workers that the economic advantages of raising sexes separately just about equal the cost of sexing.

"If this is a true picture, the geneticist could not sacrifice quality of the bird to make auto-sexing possible. However, we must realize that, if this is a true picture, the gain would in the long run justify the development of auto-sexing at the broiler level. I rather doubt that this will occur within the next five years but I certainly expect it to occur in the not too distant future."

Two members of the audience remarked that their results in segregated growing had not been very successful. One said his experience was that the cockerels "fought like hell day and night." This led to a remark by Mr. Hale that light control in the future could possibly control this factor.

PPLO Discussed

PPLO came in for its share of predictions and the audience was anxious to know what the prospects are for producing birds genetically-resistant to this disease.

Dr. Moultrie said the big problem is not so much developing birds resistant to PPLO but rather keeping them that way after they are produced.

"There is considerable work at the breeder level on producing flocks that are free of PPLO. Any successful program for keeping birds free of PPLO would necessarily require the combined efforts of both the male and the female breeder," he said.

Stress and Stress Factors

The new phrase, "stress and stress factors," has largely derived from poultrymen growing today's modern chicken in 1920 houses, Mr. Hale said. It's like putting a V-8 automobile engine in a 1920 Model T body.

Controlled lighting will be on the increase during the next five years and will mean pullets hatched during the winter will be producing as efficiently as those in the spring, thanks to new findings on how lights change

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Tranquilizer for Oral Administration Cleared

WASHINGTON—The Food and Drug Administration has announced clearance of the tranquilizer promazine hydrochloride for oral administration to cattle and horses.

The food additive order, published in the July 1 Federal Register, came on a petition filed by Wyeth Laboratories, Inc., Philadelphia.

It is understood that the product will be marketed to veterinarians for oral administration in a granular form sprinkled on the feed.

The tranquilizer (Sparine) previously could be administered only by injection.

The FDA food additive order states that promazine hydrochloride may be used as a tranquilizer for cattle (except lactating dairy animals) and horses. It is to be used in an amount not less than 0.75 mg. nor more than 1.25 mg. per pound of body weight. The medication is to be withdrawn 72 hours prior to slaughter.

Arkansas Valley Reelects Officers

DARDANELLE, ARK.—Stockholders of Arkansas Valley Industries, Inc., a poultry production, processing, marketing and feed milling firm headquartered here, have reelected officers and directors of the firm.

Harold Snyder was reelected president. Other reelected officers are: S. D. Mitchell, executive vice president and general manager; William M. Lemley, comptroller, and Christian B. Peper and W. Guy Redman, directors.

The election was conducted at the annual stockholders' meeting here June 28. Shareholders authorized the increasing of the AVI's bonded indebtedness by as much as $2,500,000,

GALVIN

(Continued from page 1)

would have bordered more or less on the sensational. Still, it carries no real surprises. All of Mr. Galvin's figures dovetail very closely with the crop image that has been builtup in traders' minds just reading and assimilating the steady flow of day-to-day crop comment coming in from the hinterlands for the past six weeks or so.

His figure on corn calls for an acreage of only 67,206,000 for harvest. It is necessary to thumb back all the way to 1882 to find a smaller one at 66,157,000 acres. That's almost 80 years ago.

Based on July 1 conditions, the way Mr. Galvin figures it, production of corn this year should be down to about 3,495 million bushels, the smallest crop since 1957 and nearly 857 million bushels less than the 1960 record of 4,352 million bushels.

Last year, this country harvested 82,117,000 acres of corn and the 10-year average is a little over 79 millions of acres. As a matter of fact, there were two successive corn crops grown during World War II when the harvest was taken from better than 90 million acres.

This tremendous acreage reduction is said to be a result of the U.S. Department of Agriculture's emergency feed grain program. Farmers were offered a proposal which they could hardly afford to turn down in return for cutting corn and/or grain sorghum acreage by a minimum of 20% of an individual grower's 1959-60 average.

Mr. Galvin's corn crop condition figure of 86% of normal is five percentage points over that of a year ago.

Using the acres and bushels mentioned in the private estimate, a yield of approximately 52 bu. to the acre is expected. Last year's all-time record high crop of corn came about from a 53 bu. yield.

Soybean Estimate

Mr. Galvin's estimate of soybean production for this year was pegged at a record 615 million bushels, stemming from an increase of about 2,750,000 acres. Output last year was 558,778,000 bu. and the record, so far, stands at nearly 580 million bushels, as established in 1958.

If a bean crop of the size Mr. Galvin predicts is realized, the government support program could well be the ultimate goal for much of the soybeans to be harvested this fall.

The U.S. is currently about 2 million bushels "in the red" insofar as our exports this season compare with those for the same period last season are concerned. Less than three months ago, the 1960-61 season had a 10 million "plus" over the preceding one. This, plus 2 million bushels more, has been dissipated.

Mr. Galvin's soybean estimate runs fairly close to the one announced last week (Feedstuffs, July 1, page 4) by the National Soybean Crop Improvement Council. The council pegged 1961 acreage at 26,935,000 acres, about 2,660,000 more than was planted in 1960.

The Galvin estimate on oats calls for a crop of 1,073 million bushels, which figures about 90 million below last year's out-turn and 1,303 million bushels for the 10-year average. This bushelage reflects the combination of crop losses from drouth in some important areas as well as clipping to make the grade for participation in the acreage reduction program.

$536,000 PROGRAM

HOLLY, COLO.—The Southeastern Colorado Cooperative Assn. has approved plans for a $536,000, five-year program that will include construction of a $60,000 office building, $300,000 feed mill at Holly and grain storage facilities at Bristol and Holly.

USDA Acts to Ease Drouth Distress

WASHINGTON—The U.S. Department of Agriculture to date has extended emergency livestock feed assistance to help offset the effects of severe drouth in 109 counties in Minnesota, Montana, and North and South Dakota.

In addition, USDA is helping state agencies and ranchers to control migratory grasshoppers now infesting rangeland in southeastern Montana, western North Dakota and northwestern South Dakota.

Secretary of Agriculture Orville Freeman says that "livestock producers will be able to obtain forage and hay immediately from lands in conserving uses and temporarily retired from production under federal farm programs, in counties designated under the livestock feed program. In addition, in most of the counties they will be able to obtain feed grains acquired under the price-support program to help feed and maintain their basic livestock herds."

Farmers and ranchers will be able to buy government-owned feed grains at current support prices in all of North Dakota's 53 counties and in 12 western and northwestern South Dakota counties. Farmers and ranchers will also be permitted to graze and cut hay from lands retired from production under the conservation reserve and 1961 feed grain programs.

Producers in the 20 eastern Montana counties can buy government-owned feed grains and can graze or cut hay from conservation lands, USDA said.

Farmers in the 24 northwestern Minnesota counties will be permitted to graze and cut hay off lands under the conservation reserve.

Emergency loans have been made available in 24 counties in Minnesota, 37 in Montana, 51 in North Dakota and nine in South Dakota. The loans can be used to finance farming and livestock operations including purchase of feed, insecticide control and improvements to irrigation and livestock water supply systems.

Don E. Reed Heads Triumph Division

CLEVELAND—Don E. Reed has been named manager of the Triumph division of Bartlett - Snow - Pacific, Inc., Cleveland, newly formed by the consolidation of the C. O. Bartlett & Snow Co. and Pacific Foundry and Metallurgy Co., according to an announcement by Dan S. Mortensen, executive vice president and general manager.

Don E. Reed

Mr. Reed has spent his entire adult life in the grain and feed industry.

For 10 years he was with the Greenwich Mill & Elevator Co. He is a former sales manager of the Shelby Mfg. Co. He was a manufacturer's representative for several lines of grain dryers, conveyors and other equipment in Ohio and Indiana for four years, and joined the C. O. Bartlett & Snow Co., one of the predecessor companies of Bartlett-Snow-Pacific, Inc., as national sales manager in 1960.

In his new capacity, Mr. Reed, who will be headquartered at the Cleveland plant, will have complete charge of product distribution, the selection and training of distributors, coordinating product development, customer service, sales promotion, and all similar management responsibilities for the entire Triumph line of equipment.

GRAIN

(Continued from page 1)

Dakota of barley, oats and corn will only be available for sales under the disaster livestock feed program—the Mundt-McGovern Act which authorized sales of CCC-owned feed grains to disaster area farmers at the support rate of the county where they were made available.

Bill's Background

This bill was originally introduced by Sen. Karl E. Mundt (R., S.D.) to make CCC stocks of feed grains available to disaster area farmers at the market price prevailing in the county for CCC grains shipped in. However, Congressman George S. McGovern (D., S.D.) intervened in the House and amended the bill so that in final passage the language fixed the price at the county price support for the shipped-in grain.

The McGovern amendment closed off the market for farmer-owned surplus grain for disaster aid since generally speaking the CCC county support was below the county market price.

In administering this act, USDA, then headed by Ezra Taft Benson, ruled that it would not intervene in areas where the market was more than 10% above support since a broader spread would not have influenced the market price of the county. That condition still prevails, it is understood, in the administration of the present emergency action.

However, on July 1 the support price for barley and oats advanced 15¢ and 12¢, respectively, for the two grains in all counties.

Reliable sources here estimate that CCC-owned stocks of barley and oats in the four states are adequate to meet the emergency requirements at this time and any break in the weather may modify conditions in some sections of the drouth states.

It seems probable, however, that, unless there is a major improvement in hay production, USDA will have to institute a hay program for livestock in the four states during the winter.

USDA's actions to conserve supplies of barley and oats supplement the designation of 109 counties during the past week in the northwestern drouth areas. (See related story.)

The Minneapolis Agricultural Stabilization and Conservation (ASCS) Commodity Office has discontinued all sale of CCC-owned oats stored in the drouth area, except for sales under the emergency livestock feed program. Other commodity offices will continue to offer CCC-owned oats for sale at the statutory minimum as announced in the CCC monthly sales list for July.

CCC-owned oats and barley are not available now for redemption of certificates issued under the payment-in-kind export program, for sales under the CCC credit program and for barter exchanges.

CCC-owned barley will continue to be offered by all commodity offices for sale at the statutory minimum as announced in the July sales list.

Barley and oats have been withdrawn from the feed grain payment-in-kind export program. Export bids accepted for payment under the program last week were 18¢ bu. for oats, and 23¢ and 24¢ bu. for barley.

Sales Discontinued

State and County Agricultural Stabilization and Conservation (ASC) Committees in the designated counties in the four-state area will discontinue sales of barley, oats and corn stored in CCC bins, except for sales under the disaster livestock feed program.

About 38 million bushels of the estimated total CCC inventory of about 48 million bushels of barley are stored in commercial warehouses or CCC bins in the four-state area. About 2.9 million bushels of the CCC inventory of 9.4 million bushels of oats are stored in the area.

BEAN MEAL

(Continued from page 1)

er than a week earlier.

July soybean meal futures closed July 5 at just a shade over $62 per ton, up $4.50 from the low tick of June 29.

Volume of meal futures trade has been holding up very well with a total of 5,584 lots of 100 tons each during the short four-day week just past for a daily average of close to 1,400 lots. The open commitment in July bean meal at the Chicago Board of Trade is being eaten into at a steady pace; as of the close of business July 3, it was down to 863 lots.

It was evident that the bull turn taken by flax and its more or less inevitable impact on linseed meal could not help but have some sympathetic effect on soybean meal as well.

Judging by what feed men are saying, while the cutback in broiler replacements goes on, the birds that were just starting the nine or ten week cycle when broiler prices "fell out of bed," still have to be fed to market weights and, for that reason, meal is still finding a fairly good outlet among the formula feed people.

Increase Cited

On paper, users of this high protein feed should feel rather encouraged in view of the Galvin crop estimate that came out July 5 on soybeans. It indicates an increase of about 2½ million in the sown acreage for beans this season. The private expert spoke of a probable 615 million bushel bean crop . . . with the condition of the growing plant at 89% of normal, which is six points better than a year ago and two points over the 10-year average.

All of this, assuming that nothing happens between now and harvest to mar the prospect, would, on its face, seem to promise plenty of bean meal to meet all needs during the 1961-62 season . . . and more besides. That extra 55 million bushels of beans constitutes a potential 1¼ million tons of soybean meal, which in itself is hardly a retail proposition.

Higher Support

However, on the other side of the picture, there is the matter of the 45¢ per bushel higher government loan on soybeans this coming season than either of the two seasons just preceding . . . $2.30 bu. on the farm. Even with a crop that is much smaller than the prospective one, and the supposed close adjustment between supply and demand as the final quarter of the 1960-61 season approaches, it seems that the country is having a little difficulty in disposing of the 558 million bushels that were grown in 1960.

This in turn might presage a flight into the loan on the part of soybeans that would overshadow anything that has been experienced during the third of a century that soybeans have been a substantial article of commerce and an important cog in this country's intricate agricultural economy. Once they get into the security of the loan, price is the only thing that will pry them out of it . . . and as long as they are held there either as live collateral or later as the defaulted kind, the crushers can't get at them to make meal and oil. So . . . with that sort of a set-up . . . there may not be a great deal of difference in the meal supply situations even with an all-time high record crop of the raw commodity.

FEED FIRM BURNS

CASTLETON, VT.—H. M. Brown & Co., manufacturer of dairy and poultry feeds, suffered a loss estimated from $50,000 to $100,000 when fire swept through a section of its plant here. The elevator, other equipment and machinery and tons of grain were destroyed. Cause of the blaze was not immediately determined. The feed plant is owned by Sen. Harold Brown and his brother, Mortimer.

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Baciferm® (zinc bacitracin) antibiotic supplement is now cleared for use in poultry feeds containing zoalene and amprolium. Official clearance was granted by the Food and Drug Administration and published in The Federal Register on June 15, 1961. Zinc bacitracin levels of 4 to 50 grams per ton may be used to promote growth and improve feed efficiency, in combination with these new coccidiostats.

Users of these new coccidiostats can once again obtain the exceptional growth-promoting characteristics and superior stability of zinc bacitracin. In tests conducted by feed manufacturers during the last several years, under a wide variety of conditions, zinc bacitracin has yielded uniformly good results while the response to penicillin has been quite variable. Baciferm gives the consistently good results your customers demand.

At the request of FDA, our research staff developed an assay procedure which is capable of accurately measuring levels of zinc bacitracin as low as four grams per ton of feed. This remarkable procedure was developed to enable you to take advantage of the unparalleled growth-promoting effectiveness of zinc bacitracin at the four gram per ton level. No other antibiotic gives consistently good results at this level.

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Companies Reserve Consultation Space At Production School

KANSAS CITY — Thirty-six companies have reserved consultation space in the exhibit area for the 1961 Feed Production School and the Small Mill Workshop, and additional exhibitors are expected, according to officials of Feed Production School, Inc.

The school will be held Sept. 11-13 at the Continental Hotel in Kansas City, with the Small Mill Workshop following on Sept. 14. Each exhibitor will have representatives at his booth to answer questions and assist enrollees with individual plant problems.

Firms which have reserved space to date are: Air Age Equipment, Inc., Topeka, Kansas; The Louis Allis Co., Milwaukee; Alloy Hardfacing & Engineering Co., Minneapolis; Andrews Machine Co., Decatur, Ill.; Bemis Bro. Bag Co., Minneapolis; Black, Sivalls & Bryson, Inc., Kansas City; Bryant Engineering Co., Columbus, Ohio; Butler Manufacturing Co., Kansas City; California Pellet Mill Co., San Francisco; Combs & Co., Kansas City; Daffin Manufacturing Division, Daffin Corp., Lancaster, Pa.; Dodgen Industries, Humboldt, Iowa; Dura-Buket Division, National Oats Co., East St. Louis, Ill.; Food Machinery & Chemical Corp., Riverside, Cal.; Fairbanks, Morse & Co., Kansas City; Dave Fischbein Co., Minneapolis; B. F. Gump Co., Chicago; Hardy Scales Co., Maywood, Cal.; Hayes & Stolz Industrial Mfg. Co., Inc., Ft. Worth; Howe Scale Co., Rutland, Vt.; Jacobson Machine Works-Champion Portable Mill Co., Minneapolis; Landers Machine Co., Ft. Worth; M-E-C Co., Division of Altamil Corp., Kansas City; Myers-Sherman Co., Streator, Ill.; Pamco, Inc., Oskaloosa, Iowa; Perma-Weld, Department United Mfg. & Engineering Corp., Topeka, Kansas; Prater Pulverizer Co., Chicago; Richardson Scale Co., Clifton, N.J.; Roskamp Huller Mfg. Co., Inc., Cedar Falls, Iowa; Ross Machine & Mill Supply, Inc., Oklahoma City; Sprout, Waldron & Co., Inc., Muncy, Pa.; The Strong-Scott Mfg. Co., Minneapolis; Union Bag-Camp Paper Corp., New York; Universal Hoist Co., Cedar Falls, Iowa; Wenger Mixer Mfg., Sabetha, Kansas; Younglove Construction Co., Sioux City, Iowa.

Several additional spaces are still available, according to Production School officials.

Name Speakers, Topics For Poultry Event at Cornell July 12-13

ITHACA, N.Y. — "Thousands of concentration camps are scattered across the U.S. The prisoners are laying hens, packed into hen houses more closely than residents of many big city tenements."

Solutions to this will be discussed July 13 by Dr. J. M. Snyder of Beacon Milling Co., Cayuga, N.Y., in a talk entitled "Concentration Camps for Layers," according to Cornell University officials.

Dr. Snyder will be one of 11 speakers at the annual Poultry Men's Get-Together at the New York State College of Agriculture. Poultry men from throughout the Northeast are expected to attend the two-day event, which begins Wednesday, July 12, on the Cornell campus.

Other speakers will include, from Cornell: Dr. John G. Matthysse and Joseph Foulk, who will give new recommendations for poultry pest control; Prof. Jonathan S. Tobey, who will speak on machine business records for poultrymen; Dr. P. P. Levine, who will tell how chronic respiratory diseases in fowl can be controlled by treating the egg instead of the chicken with antibiotics, and Prof. Charles E. Ostrander, who will suggest solutions to problems that arise when chickens are raised near residential areas.

Other Speakers

Among out-of-town speakers will be Dr. E. I. Robertson, John W. Esheiman & Sons, Lancaster, Pa., who will outline results of experiments showing the need for more vitamins A and E in poultry diets; Carroll Dunham of Southbury, Conn., president of the Northeastern Poultry Producers Council, who will discuss marketing opportunities, and Dr. Cecil F. McClary of Heisdorf & Nelson Farms, Kirkland, Wash., who will speak on lighting programs for pullet raising.

A barbecue will be held at 6:30 p.m. Wednesday at Robert H. Treman State Park.

MANURE SEEN AS POWER SOURCE

AMES, IOWA—This is about a case of a sort of "perpetual motion" involving hogs and their manure.

Manure, it seems, some day may be the source of power for the heating, lighting and ventilating of hogs' houses.

The problem, according to Dr. T. E. Hazen of Iowa State University, is to develop a system to recover the volatile gases. Dr. Hazen was speaking at the summer meeting of the American Society of Agricultural Engineers at Ames.

Daily sewage gas (methane) production of 410 hogs averaging 103 lb. in weight was found by Iowa researchers to be 4,400 British thermal units (BTU) per animal. In the most severe weather, a well built hog house will require a maximum of about 4,800 BTU's per animal to maintain the building at 60° F.

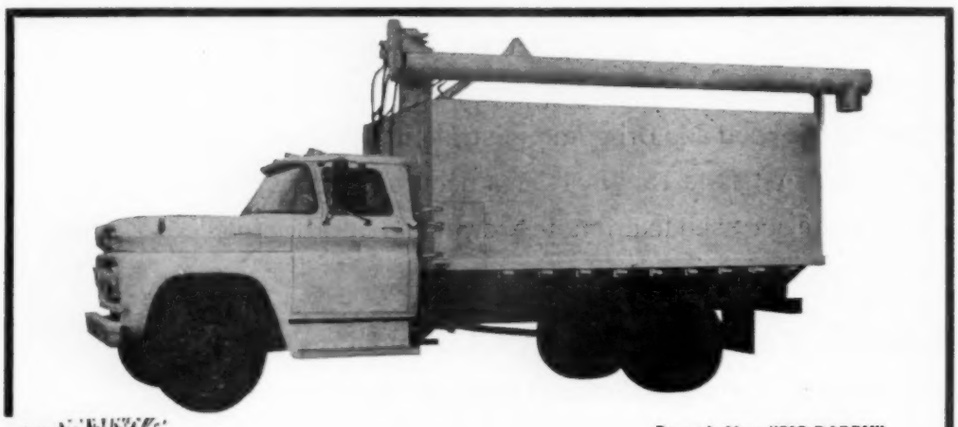
To Discuss Poultry Industry Opportunities

MINNEAPOLIS—How today's college students can embark upon high-paying and exciting careers in the poultry industry by majoring in one or more of various scientific professions will be discussed by counsellors of the University of Minnesota at the American Poultry Congress & Exposition in Minneapolis July 18-20.

In space provided by the American Poultry & Hatchery Federation, staff members of the poultry department at the University of Minnesota will be prepared to discuss with college-age persons a variety of careers in scientific investigation in the poultry field.

Numerous scholarships are available.

Professional men and women are needed in genetics, nutrition, pathology, physiology, food technology, bacteriology and veterinary medicine.



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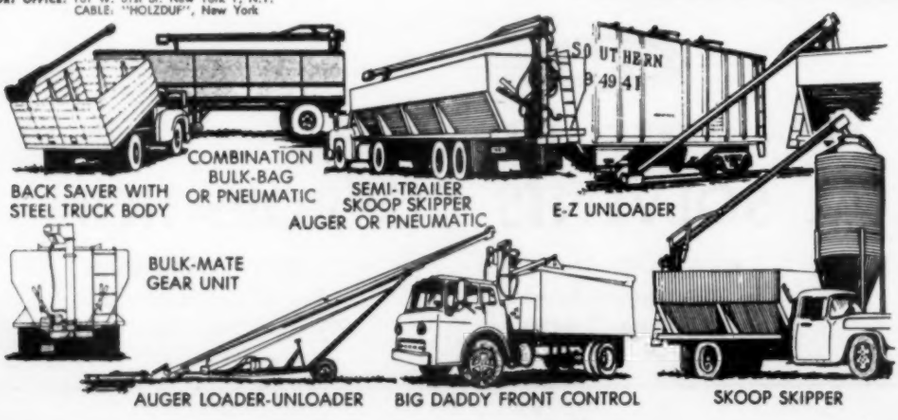

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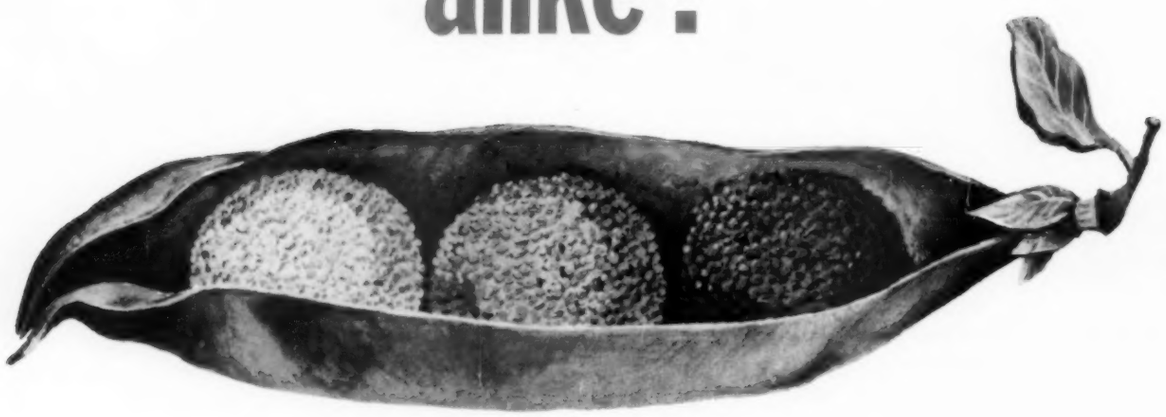
Are all dicalcium phosphates alike?



...not by a long shot!

Chemical solubility and biological feeding tests conducted by independent research laboratories have proved that "all defluorinated phosphates are not alike."

But are all dicalcium phosphates alike?

A comprehensive chemical and physical analytical study of Smith-Douglass DIKAL and two competitive products was recently concluded by Cox and Gillespie, Chemists and Chemical Engineers, Richmond, Va. Their report, covering analyses and comments, follows:

Comments by Cox and Gillespie

1) DIKAL as compared to Sample A:

a) The relatively high magnesia content of Sample A (3.56%) resulting in high magnesium phosphate and magnesium carbonate is not thought to be due to impurities in limestone, but to other magnesia which has been added to raise the phosphorus solubility. Unreacted calcium carbonate and magnesium carbonate are high.

b) DIKAL has a higher dicalcium phosphate content.

c) DIKAL has a lower apatitic phosphate content. Apatitic phosphates are highly insoluble.

d) DIKAL has a higher total phosphorus (phosphate) content.

e) The phosphate in DIKAL is more soluble.

f) The titration curve shows DIKAL to be buffered—therefore will retain its solubility.

g) DIKAL is "not loaded" with magnesia—its solubility is due to chemical processing. It contains very limited amounts of unreacted limestone or magnesia.

h) DIKAL is more uniform in granulation and it has a granule hardness more resistant to abrasion.

2) DIKAL as compared to Sample B:

a) Sample B has a high aluminum phosphate (6.44%) and an iron phosphate above that of DIKAL. The unreacted limestone (calcium carbonate) is much higher (10%). The total *calcium phosphates* (mono and di-) are much lower than DIKAL—62% in comparison with 71%. The apatitic content is higher.

b) Irrespective of the unfavorable chemical comparison between sample B and DIKAL—the physical comparison is more so. In every respect, Sample B is inferior . . . including an off color and odor. The acid insoluble shows much carbon.

c) The physical advantages of DIKAL are most apparent—odor, free flowing, hardness of granule, uniformity of particle.

d) DIKAL has a higher di-calcium phosphate content, is more soluble, has lower apatitic phosphate, and a higher total phosphorus and calcium.

e) DIKAL is lower in the impurity iron phosphate, and much lower in aluminum phosphate.

f) DIKAL is substantially lower in unreacted "limestone."

g) DIKAL has less "free carbon"—shown by color and acid insoluble.

In conclusion, DIKAL is significantly more soluble than competitive products tested. Conversely, DIKAL has one-third to one-half less insoluble phosphate.

Samples represent commercially available products and are designated in the same manner as in the recently published "Phosphorus Availabilities as determined by Assays conducted by the Lime Crest Research Laboratory, Newton, New Jersey" (copies available upon request).

	Competitive dicalcium phosphate A (produced from "electric furnace" phosphoric acid)	Competitive dicalcium phosphate B (produced from "wet process" phosphoric acid)	Smith-Douglass DIKAL
Dicalcium Phosphate, $CaHPO_4$	49.78%	49.43%	63.57%
Monocalcium Phosphate $Ca(H_2PO_4)_2$	9.68	12.51	7.33
Apatitic Calcium Phosphate*	1.31	1.07	.41
Calcium Carbonate $CaCO_3$	17.68	9.78	5.73
Magnesium Phosphate $Mg(H_2PO_4)_2$	13.46	4.09	3.98
Aluminum Phosphate $AlPO_4$	.02	6.44	2.54
Iron Phosphate (Ferric) $FePO_4$	.04	5.44	4.35
Disodium Phosphate NaH_2PO_4	Trace	.41	1.64
Magnesium Carbonate $MgCO_3$	2.29	.34	.18
Calcium Sulfate $CaSO_4\ 2H_2O$	Trace	7.16	7.07
Sodium Fluosilicate Na_2SiF_6	None	.03	.26
Calcium Fluoride CaF_2	.06	None	None
Sodium Chloride, NaCl	None	None	.04
Free Phosphoric Acid	.14	.12	.16
Unreacted Silica and Carbon	1.08	.70	1.21
Moisture and Water of Crystallization**	4.46	2.48	1.53
	100.00	100.00	100.00

*Apatite content is arbitrary and approximate.
**Water of crystallization is by difference.

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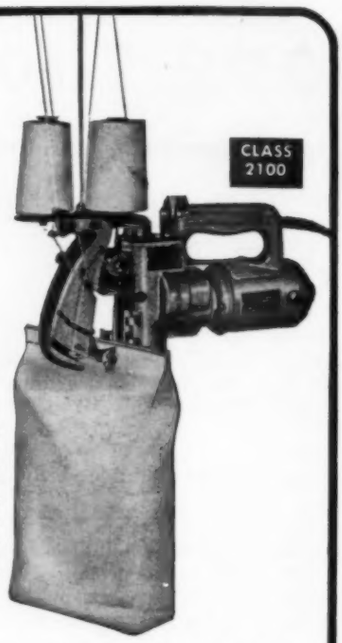

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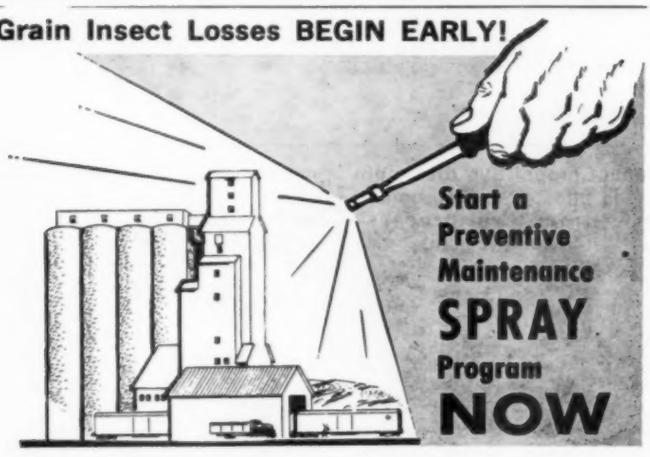

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MOBILE PELLET MILL—Labels show relative positions of various processing units of this new mobile pellet mill introduced by Barnard & Leas Mfg. Co., Cedar Rapids, Iowa. A single, heavy-duty truck carries and powers the pellet mill, steamer, cooler and grinding and mixing equipment, including molasses mixing facilities. The manufacturer says tests show that both high-roughage and high-grain content pellets can be produced at practical rates with the new pelleter.

Dr. Cochrane Tells How Ag Act Would Work With Eggs

STORRS, CONN.—The administration's supply-management farm bill proposals appear to be dead, but it may be of interest to read what the U.S. Department of Agriculture's top economic policy architect had to say about approaches to government measures affecting eggs.

Dr. Willard Cochrane, USDA director of agricultural economics, speaking at the University of Connecticut's Poultry Day, listed what he said were some of the alternatives available to egg producers under the omnibus farm bill.

Dr. Cochrane said the proposed Agricultural Act of 1961 "is designed to provide farmers with the institutional machinery for coming together and developing supply adjustment programs, and with democratic methods for approving or rejecting such programs."

Under the enabling procedures of the bill, he said, farmers could elect either the marketing order route or a stabilization program.

Dr. Cochrane illustrated with the following possibilities how the enabling authority of the proposed act might be used by egg producers:

One approach would be no program. In other words, if producers didn't want a program they could reject in referendum any program submitted to them.

A second might be a promotional effort under a marketing order tied in with some minimal grading or standards supervision. This would permit the establishment of programs to promote the marketing, distribution and consumption of eggs.

A third alternative might include the establishment of grades and standards for eggs under a marketing order that regulated the use into which eggs of different quality might be sold. A program of this type, Dr. Cochrane stated, "could be effective in protecting the demand for table eggs by insuring that consumers get only high quality eggs."

A fourth program alternative could be supply management. This could be done under a marketing order or a price stabilization program.

"Any realistic solution to the farm surplus problem requires the adjustment of our productive capacity in agriculture to current and attainable domestic and foreign needs and demands," Dr. Cochrane said. "We must do so at prices that yield efficient family farmers decent incomes."

Solons Ask for More Poultry Export Effort

By Special Correspondent

WASHINGTON — Southern Senators are paying more attention to the broiler situation in the South with appeals to various agencies to redouble their efforts to put more poultry into foreign markets.

Sen. J. William Fulbright (D., Ark.), who with Sen. Richard Russell (D., Ga.), has been working toward this end, announced that the U.S. State Department said Italy has agreed to drop its ban on poultry and will accept $200,000 worth. He also expressed the hope that France will be next to remove its embargo.

Meanwhile, Sen. Russell, aided by John Sparkman (D., Ala.), also appealed to the U.S. Department of Agriculture and other agencies to expand markets in foreign countries.

A directive, approved by the Agricultural Subcommittee and the Senate Appropriations Committee, suggested that a stepped-up campaign be made toward developing entirely new markets for American poultry through the use of trade exhibits, demonstrations and experimental programs.

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Convention Calendar

July 12—California Feeders Day; University of California, Davis; chm., Dr. G. P. Lofgreen, Animal Husbandry Dept.

July 12—North Dakota Turkey Day; North Dakota State University, Fargo; sec., Irving J. Mork, Box 2408, North Dakota Turkey Federation, State University Station, Fargo.

July 12-13—Poultrymen's Get-Together; Cornell University, Ithaca, N.Y.

July 14-18—Georgia Feed Assn.; Grand Bahama Club, Grand Bahama Island; sec., W. E. Merritt, Suite 1-A, 361 E. Paces Ferry Rd. N.E., Atlanta 5.

July 18-20—American Poultry Congress & Exposition; Municipal Auditorium, Minneapolis; Don M. Turnbull, sec., American Poultry & Hatchery Federation, 521 E. 63rd St., Kansas City 10, Mo.

July 24-28—Southeastern Egg Quality and Grading School; Auburn University, Auburn, Ala.; sec., Southeastern Poultry & Egg Assn., Harold E. Ford, 235 E. Ponce de Leon Ave., Decatur, Ga.

July 27—Technical Alfalfa Conference; co-sponsored by the American Dehydrators Assn. and USDA Western Utilization Research and Development Division; Western Regional Research Laboratory, USDA, Albany, Cal.; chm., Dr. G. O. Kohler, Chief, Division Field Crops Laboratory, Western Regional Research Laboratory, 800 Buchanan St., Albany 10.

Aug. 2-4—West Virginia Poultry Assn. Convention and Festival; Moorefield, W.Va., sec., Wilson Smith, Petersburg.

Aug. 3-4—National Soybean Processors Assn.; Edgewater Beach Hotel, Chicago, Ill.; sec., Wm. K. Self, 3818 Board of Trade Bldg., Chicago 4, Ill.

Aug. 7-9—Southeastern Management Roundtable; Continuing Education Center, University of Georgia, Athens; sec., Southeastern Poultry & Egg Assn., Harold E. Ford, 235 E. Ponce de Leon Ave., Decatur, Ga.

Aug. 7-12—Texas Feed Microscopy Short Course; Memorial Student Center, Texas A&M College, College Station; E. E. Brown, Station Microscopist.

Aug. 8-9—Wisconsin Nutrition School; Memorial Union, University of Wisconsin, Madison; Dr. Robert Grummer, Animal Husbandry Dept.

Aug. 9—Science at Work, Open House and Reports by Staff Scientists; Connecticut Experiment Station, Lockwood Farm, Mt. Carmel, Conn.

Aug. 11—Specific Pathogen-Free Swine Conference; Center for Continuing Education, University of Nebaska, Lincoln; Louis Welch, Specific Pathogen-Free Swine Coordinator, University of Nebraska.

Aug. 13-18—School of Executive Development in Business Management, Unit II; Continuing Education Center, University of Georgia, Athens; sec., Southeastern Poultry & Egg Assn., Harold E. Ford, 235 E. Ponce de Leon Ave., Decatur, Ga.

Aug. 18—Ohio Swine Day; Ohio State University, Columbus.

CALENDAR FOR 1961-62

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Aug. 20-22—National Hay Assn.; Phoenix Hotel, Lexington, Ky.; sec., Mrs. Elgene L. Hicks, 900 E. Bridge St., Plainwell, Mich.

Aug. 21—Illinois State Turkey Growers Assn.; Willis Clark farm, U.S. Hwy. 150, Mahomet, Ill.; sec., S. B. Swann, Kauffman Turkey Farms, Waterman, Ill.

Aug. 21-22—Kentucky Feed & Grain Association; Brown-Suburban Hotel, Louisville, Ky.; sec., Jack Weber, Box 425, Lexington.

Aug. 24-26—North Carolina Feed Manufacturers Assn.; Cavalier Hotel, Virginia Beach, Va.; sec., McNair Evans, Box 428, Laurinburg, N.C.

Aug. 24-27—Georgia Poultry Institute; Rock Eagle 4-H Club Center, Eatonton, Ga.; Dewey McNiece, Extension Poultry Dept., University of Georgia, Athens.

Aug. 28-29—American Soybean Assn.; Claypool Hotel, Indianapolis, Ind.; Geo. M. Strayer, Hudson, Iowa.

Aug. 30—"Golden Goodness of Virginia Fresh Eggs Month" Kickoff Dinner; John Marshall Hotel, Richmond, Va.; J. Paul Williams, sec., Virginia Egg Council, 615 E. Franklin St., Richmond.

Sept. 8—Missouri Swine Day; University of Missouri, Columbia; Dr. Leland Tribble, Animal Husbandry Dept.

Sept. 11-12—Minnesota Nutrition Conference; Institute of Agriculture, University of Minnesota, St. Paul; chm., Dr. L. E. Hanson, Animal Husbandry Dept.

Sept. 11-13—Feed Production School; Continental Hotel, Kansas City; sponsored by Feed Production School, Inc.; pres., Lloyd Larson, 20 W. 9th St. Bldg., Kansas City 5, Mo.

Sept. 13-14—Maryland Feed Service Conference; Chemistry Auditorium, University of Maryland, College Park; Wade H. Rice, Poultry Dept.

Sept. 14—Small Mill Workshop; Continental Hotel, Kansas City, Mo.; sponsored by Feed Production School,

(Turn to CALENDAR, page 80)

New Listings

For the convenience of readers who scan the Convention Calendar regularly for new listings, those added to the column in the current week appear separately from ones which have been entered previously. The following week they will be moved to their proper slot where they will remain until the event is held.

Aug. 25—Indiana Swine Day; Purdue University, Lafayette; chm., Dr. W. M. Beeson, Animal Science Dept.

Sept. 12-14—Dixie Poultry Exposition; City Auditorium, Asheville, N.C.; Box 226, Monroe, N.C.

Oct. 12-13—West Virginia Feed Dealers Assn.; Blackwater Falls Lodge, Davis, W.Va.; sec., J. Z. Ellison, 801 Willowdale Road, Morgantown, W.Va.

1962

Jan. 28-30—Midwest Feed Manufacturers Assn.; Shamrock-Hilton Hotel, Houston, Texas; exec. vice pres., Lloyd Larson, 20 W. 9th St. Bldg., Kansas City, Mo.

Feb. 1-2—Oregon Animal Industry Conference; Oregon State University, Corvallis, Ore.; co-sponsored by the Oregon Feed & Seed Dealers Assn. and Oregon State University; chm., Bill Eggimann, Dairy Cooperative Assn., 2613 S.E. 8th Ave., Portland.

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Past and Future Patterns Of Regional and National Growth in Livestock Production

"Livestock production will increase in most areas where feed companies and other agri-business firms offer technical assistance and provide leadership."

By Dr. Walter J. Wills
Southern Illinois University

That the livestock industry is dynamic is the understatement of the year. During the next two decades increased production efficiency, changes in production areas, changes in institutional arrangements and production for the market will highlight the livestock industry. Production for the market refers to a recognition of the types of animals, finish and other end product characteristics wanted by consumers, then adapting production to these demands consistent with price-cost relationships.

Nonetheless, we recognize a production lag that must be overcome. Production per man-hour in meat (animal) production is up 15% since World War II, and for all livestock and livestock products output per man hour is up about 60%, but for crop production man-hour efficiency has more than doubled. Substituting capital for labor has effected this improved efficiency.

Research developments at agricultural schools and colleges and in the research centers of agri-businesses throughout the U.S. point to the possibilities of a remarkable increase in man-hour efficiency for the meat animal industry comparable with the changes that have occurred in the poultry, dairy and field crop sectors of agricultural production. Practical application of this information will be accomplished largely by increased needs for capital. Automation in meat animal production is just starting. Many engineering and management problems are being attacked, but during these formative years obsolescence in present plant and facilities and for the innovator must be recognized.

PRODUCTION CHANGES—Since the middle 1920's the calf crop has increased from about 75% to about 87%. The lamb crop has increased from 87% to 95%. Pigs saved per litter have increased from less than 6 to over 7. These increases in productivity resulted from better management, improved breeding and improved nutrition.

In the earlier period spring pigs made up over two thirds of the total hog production. In recent years they have made up less than three fifths of the total. Thirty to forty years ago about one sixth of the spring pigs were farrowed in the December-February period. In more recent years about one third were farrowed in this period. During the 1920's about two fifths of the fall pig crop were farrowed in the June-August period. This has changed so that about half of the fall crop is farrowed in the June-August period.

These changes in the production pattern mean less of a seasonal movement of animals to market and less seasonal price variations. Seasonal months of low prices have also changed with this seasonal shift in production.

Total livestock production in the U.S. has increased. Using 1924 as a starting point, here are the percentage increases in numbers on farms: Total cattle 47%, beef cows 126%, dairy cows 14%, other cattle 60% and pig crop 37%.

Interstate animal shipping has shown a remarkable increase. In the U.S., cattle shipments from one state to another have more than doubled and hog shipments have increased five fold. While no data are available, intrastate shipments have increased during this same period.

The livestock industry has been characterized by major cyclical fluctuations in production and marketing.

CONSUMPTION—U.S. meat consumption is closely related to livestock production and slaughter. As slaughter increases per capita, consumption increases. Exports and imports per capita are relatively small in relation to total per capita consumption.

Compared with the 1935-39 period, per capita consumption of beef has increased 44%; pork has increased 18%. The price of beef has increased about the same as consumption, while pork prices are somewhat lower than in the pre-war period.

Space precludes discussion of changing price relationships and the underlying reasons thereof, but it is evident that shifts in consumption habits have had their impact on production and this will become increasingly important.

The production of canned and more highly processed meats will continue to expand. This will provide better outlets for certain grades of livestock and may reduce price spreads between some grades and species.

REGIONAL PRODUCTION—About half of the dairy cows in the U.S. are in the north central region. Since the 1920's about half the reduction in milk cows occurred in the west north central states. The only major geographical area where there was an increase in dairy cows was in the Pacific states.

Frequent comments are made about the rapid increase in beef cattle numbers in the southern states. From 1924 to 1961 beef cow numbers in the east south central states increased about 2.1 million head; the east north central and Rocky Mountain states each had a 1.1 million increase, the west north central states had an increase of 4.3 million and for the south Atlantic states the increase was 1.4 million. The Rocky Mountain states produce a much smaller portion of total beef cattle now than formerly and the southern states have expanded their share from about 10% to about 20%.

Over three fourths of the hogs still are produced in the north central states. But, relatively, the South has increased hog production as much as cattle production.

In recent years the proportionate share of commercial cattle feedlot operations outside the Corn Belt has grown. This particular share of commercial feedlot expansion is important and probably will continue. But recent developments in the Corn Belt are also of interest. Many cash grain farmers are turning to a specialized supplemental livestock enterprise to more fully utilize available resources. This type of livestock enterprise will become more prevalent, too.

SLAUGHTER AND PROCESSING — Generally, operations have been moving toward the areas of production. This is emphasized by the decline in relative importance of the St. Louis and Chicago areas as meat packing centers.

INSTITUTIONAL ARRANGEMENTS—There has been much talk about integration in the livestock industry. The popularity of this concept will vary from time to time but a type of coordinated livestock production

EDITOR'S NOTE: *Dr. Wills, whose article alerts feed men to the challenges of a growing and changing livestock industry, is chairman of the agricultural industries department at Southern Illinois University, Carbondale. His undergraduate and graduate studies were completed at the University of Illinois, where he received his Ph.D. in agricultural economics in 1952.*

After receiving a master's degree in 1937, Dr. Wills was a credit examiner for the St. Louis Production Credit Corp. From 1947 to 1953 he was an assistant professor at the University of Illinois. Then, after a six-week temporary appointment with the U.S. Department of Agriculture, he joined the staff of the American Trucking Assn. in Washington, D.C. From November, 1954, until joining the Southern Illinois University staff in March, 1956, Dr. Wills was a marketing specialist with the federal extension service in Washington.

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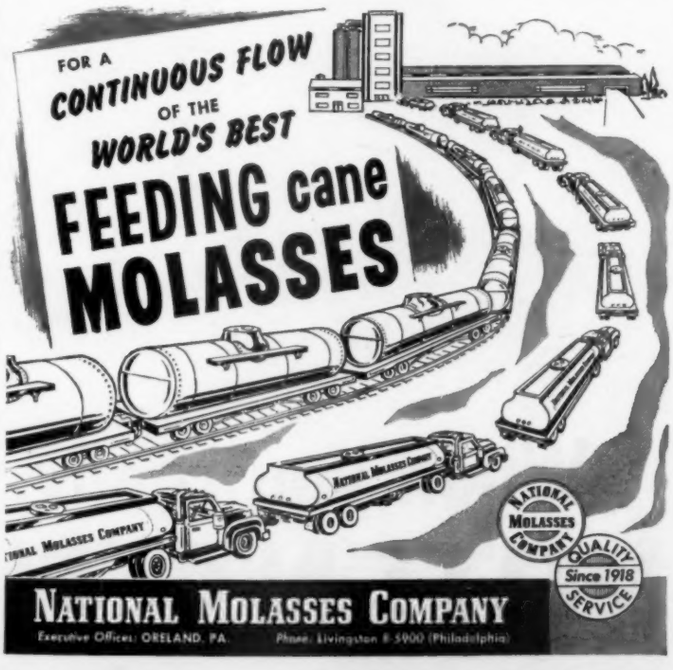

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and marketing is on the horizon in many areas of the country. This type of program could cause violent production shifts to occur depending upon where such changes are adopted. On the basis of past developments in the industry, these changes will probably occur most rapidly outside the present commercial livestock production areas.

In the past, labor, capital and management of livestock operations have been largely centered in the individual farmer. During the next two decades, these factors will increasingly be provided in part or in whole by different individuals. This can influence the size of operations, methods of pricing and areas of production. While product and establishment of price have tended in the past to move together in marketing channels, this may not necessarily be true in the future. Such a revolutionary shift in marketing can affect production patterns.

It is often assumed that various enterprises develop in particular areas because certain natural resources in that area were particularly adapted to the enterprises that became dominant. But in many areas a substantiation of this hypothesis is difficult if not impossible.

One of the reasons for the shift of the broiler industry out of the Corn Belt was increased feed efficiency which in turn made freight rate relationships between feed and meat particularly important. With the increases in feed conversion now within reaching distance in swine production, some of the same type of shifts could occur.

In addition, farm labor in some areas has received a relatively low rate of return. As the present workers pass out of the picture, interregional wage rates may tend to equalize; and the differential in rates between farm and nonfarm groups will decrease. This will encourage increased mechanization in meat animal production to increase output per man and raise per man income. The effect of this change will be to increase production most rapidly in those areas where industry leaders are willing to provide the added capital and management to bring this about. This does not necessarily insure the Corn Belt farmer he will continue to be the major producer.

New Concept?

A new concept in measuring feed efficiency may be used within this decade. Instead of pounds of feed per pound of gain, it may be pounds of feed per pound of lean meat produced. This would imply a change in feeding and management and possibly even a change in pricing. Again, in which area of the U.S. will the leadership aggressively accept the challenge and reap the rewards of such an opportunity?

With the improved economic condition of western European countries, there may well be an improved export market for U.S. meat. This assumes a price structure and pricing system that is competitive with other countries. If such a market is developed, production to meet their requirements may introduce a new concept of specification production and marketing. Which area in the U.S. is willing to accept this challenge?

If we assume that agri-business firms will increase their employment of agriculturally trained college graduates in the next decade, then we can expect these firms, the feed companies, the meat packing companies, the credit agencies and the transportation industry to have a marked influence on the location of the livestock industry. The leadership and vision of the agriculturally related business leaders throughout the country will largely determine where the livestock in the U.S. will be produced.

CONCLUSION—Livestock production will continue to increase. During the next two decades, increases should be comparable to increases during the past two decades. There will be more specialized operations, both on a full-time basis and as supplemental enterprises. Much of this increase will occur outside the Corn Belt. Many of the present small producers will either expand or be forced out of business.

Future production cycles will be shorter and the percentage change from peak to trough or from trough to peak will be smaller. This, along with less severe seasonal movements of livestock, means there will be less unused capacity needed to handle the peak volume.

Through the substitution of capital for labor, much greater efficiency of labor in meat animal production will be common, probably doubling within the next two decades. A continual improvement in output per unit of breeding stock will further increase efficiency in livestock production. New strides in nutrition and breeding will further reduce pounds of feed per pound of gain. Probably livestock production will increase most in those areas where producers and processors will work together to further develop livestock that more nearly meet consumer demand, reflecting throughout marketing channels this consumer preference through price.

Livestock production will increase most in those areas where feed companies, financing agencies and other agri-business firms offer technical assistance and provide imaginative leadership in meeting the new opportunities provided by technological developments in a dynamic, vibrant and vigorous industry. Any firm, either farm or farm-related, that prefers to not meet this challenge will be by-passed or supplanted by those firms that have the imagination to do the job that is needed.

NEW KANSAS MILL

LA CROSSE, KANSAS—Construction of a $150,000 formula feed mill with a 100 ton capacity is underway at the Farmers Union Merc. & Elevator Co. here.

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NEW FACILITIES—The Wapakoneta (Ohio) Farmers Grain Co. constructed this modern farm supply store and office several years ago. Harry Maurer, manager of the firm, believes in maintaining a well-supplied farm store to meet the demands of diversified farming in the area.

Ohio Firm Meets Challenge of On-the-Farm Grinding, Mixing

By Al P. Nelson
Feedstuffs Special Writer

In many sections of the country custom mill operators are keeping their eyes on the threat of farm-mix operations. The farmer who has his own grind-mix mill may still buy his concentrates from a local mill, but again he may not. He may try to build his own feeds from the ground up, so to speak.

Harry Maurer, manager of the Wapakoneta (Ohio) Farmers Grain Co., believes that there are ways to fight this type of business threat. He is using some successful means in his area to do so.

First of all, he states that there are only 10-15 farmers in his trade area who are actually doing grinding-mixing on their farms. In the past there have been quite a number of customers who have had hammermills, but as these wear out many farmers hesitate to buy new mills, Mr. Maurer says. Some farmers tell him they think the investment in new hammermills is too high.

Here's how Mr. Maurer fights on-the-farm grinding-mixing:

(1) Low grinding rates. This is one way to fight the farm-mix threat. This Ohio firm charges 10¢ per cwt. for grinding and mixing, as do most others in the region. At this rate, farmers can hardly complain about high grind-mix rates at a mill, and most of them don't. The grind and mix rates, Mr. Maurer says, are set by competition.

(2) Grain bank. Most farmers in a diversified farm area such as Mr. Maurer serves, can use a grain bank plan. Farmers know they can save time and money through a grain bank setup, according to Mr. Maurer, who has 85,000 bu. storage capacity at the elevator, much of which is devoted to grain bank storage.

"We permit the farmer to bring in as many bushels of corn and oats as he thinks he will use in approximately 4 months," says Mr. Maurer. "He is charged 3¢ per bushel for this time period. Feed storage oats are shrunk to 12% moisture and corn is shrunk to 14% moisture.

"This shrinkage is done by chart, based mostly on the old rule of thumb of losing 1.2% weight for each per

CUSTOM MILLING—Custom milling facilities of the Wapakoneta (Ohio) Farmers Grain Co. are shown here. Manager Harry Maurer believes that "where farmers get good grinding and mixing service, in addition to nutritional and feeding advice, the threat of on-the-farm mixing and grinding is lessened."

WELL-STOCKED FARM STORE—This wall display shows variety of farm supplies that the Wapakoneta (Ohio) Farmers Grain Co. keeps on hand for its customers. Harry Maurer, firm manager, believes in a well-stocked farm store to win and maintain grinding and mixing volume.

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- extend the period of high egg production
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- improve egg production and feed efficiency in presence of disease and at times of stress
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END OF LAYING CYCLE	Control	Terramycin 100 gm/ton
Egg Production		
Pretest production (4 weeks), %	46.1	46.1
Test production (16 weeks), %	43.6	47.0
Improvement, %	—	7.5
Feed Efficiency		
Feed/dozen eggs, lbs.	8.2	7.0
Improvement, %	—	14.6
Economics (1000-bird basis)[1]		
Eggs produced, dozen	3986.0	4387.0
Difference dozen	—	401.0
Total feed, tons	16.34	15.35
Increased production costs, $	—	31.48
Increased gross return, $	—	120.3
Increased net return, $	—	88.82

1. Feed $100/ton; Terramycin 8.5¢ gram; Eggs selling for 30¢ dozen

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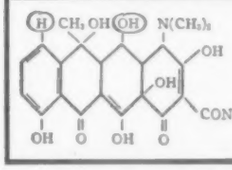

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REFRIGERATED HOG SERUM—The refrigerator shown here is kept stocked with hog serum for customers of the Wapakoneta (Ohio) Farmers Grain Co. Convenience of farm supplies is a strong selling point for the firm.

cent of moisture taken out of the grain.

"I believe that if a farmer becomes specialized he will think about the possibility of grinding-mixing with his own equipment," says Mr. Maurer, "but the diversified farmer won't, and I think he'll be around for a long time."

(3) Delivery or pickup. For the small farmer the firm's pickup and delivery service is very much appreciated. Grain is picked up for 7¢ cwt. and the charge is the same for delivering bulk. The minimum delivery is $1.50.

Points Out the Costs

(4) Talking over costs. Quite a number of farmers who are thinking about farm-mix operations will talk to their local feed dealers about it, Mr. Maurer points out. He welcomes the opportunity to talk to anyone who has this step in mind. He doesn't try to dissuade them, but asks them to be certain they are considering all their costs. When they ask "what costs," Mr. Maurer points out the investment cost, interest on the investment, depreciation, labor, etc. These are often the costs which are left out by farm-mix equipment salesmen when they sell machinery, Mr. Maurer declares.

"Ask the farmer to get out his pencil and figure all his farm-mix costs accurately," says Mr. Maurer, "and he'll usually find it will pay him to stick to his local dealer."

(5) Feeding help. The good feed miller, says Mr. Maurer, can give some customers valuable feeding advice which they would not get if they were operating a farm-mix setup on their farm.

Many farmers realize that the help they get from a reliable feed dealer about poultry and livestock feeding is valuable, says Mr. Maurer, and it is up to every feed man to accentuate this help.

Value of Good Advice

"Where the farmer gets good grinding and mixing, and good service and nutritional and feeding advice, the threat of farm-mix operations is lessened," says Mr. Maurer. "We just can't condemn this type of operation. We must show the farmer why he's better off to continue to let us do his grinding and mixing."

Farm Supply Store

Mr. Maurer also feels that a well-stocked farm supply store is an asset in winning the trade of farmers and keeping their grinding and mixing volume. There are many farmers today who need farm supplies regularly and who come to get them from a reliable dealer.

Take hog cholera serum for example. Mr. Maurer has a refrigerator full of this serum at all times for the convenience of his hog raising customers, and they appreciate it. Farmers like to come in and talk with Mr. Maurer or others on the staff about the effectiveness of hog serum and how many customers are using it locally.

The average farmer, too, needs such items as farm hardware, power tools, metal buckets, poultry equipment, etc. He likes to buy these at the place where he gets his grinding and mixing done. When the farmer sets up his own farm-mix equipment, he often must look for other connections to buy such equipment. He hates to go back to his former grinding source to get such items.

"We don't turn away any customers," says Mr. Maurer. "If they have their own farm-mix units, we try to sell them supplement and other supplies. And some of them like our well-stocked farm supply store, too. It is really paying off for us."

Several years ago the Wapakoneta Farmers Grain Co. built new offices and a new farm supply store, and added some storage facilities for grain and fertilizer. The firm also has a large farm equipment store nearby and handles the International Harvester line.

"We are in a very competitive area," says Mr. Maurer, "but I do think that my competitors and I are going to be able to hold our own on this farm-mix situation. We have lots of diversified farmers around here. They can make more profitable use of their time by letting us do their grinding, mixing and delivering the feed back to them and placing it right where they want it."

Washington Nutrition Event Is Nov. 13-14

MT. VERNON, WASH.—The annual Animal Industry Conference, cosponsored by Washington State University and the Washington State Feed Assn., has been scheduled for Nov. 13-14. The event will be held at Skagit Valley College here, according to John Wilson, association manager.

FEED MAN DIES

MEDFORD, WIS. — Services were held recently for William T. Clausintzer, 69, retired operator of feed mills in Medford and Milan.

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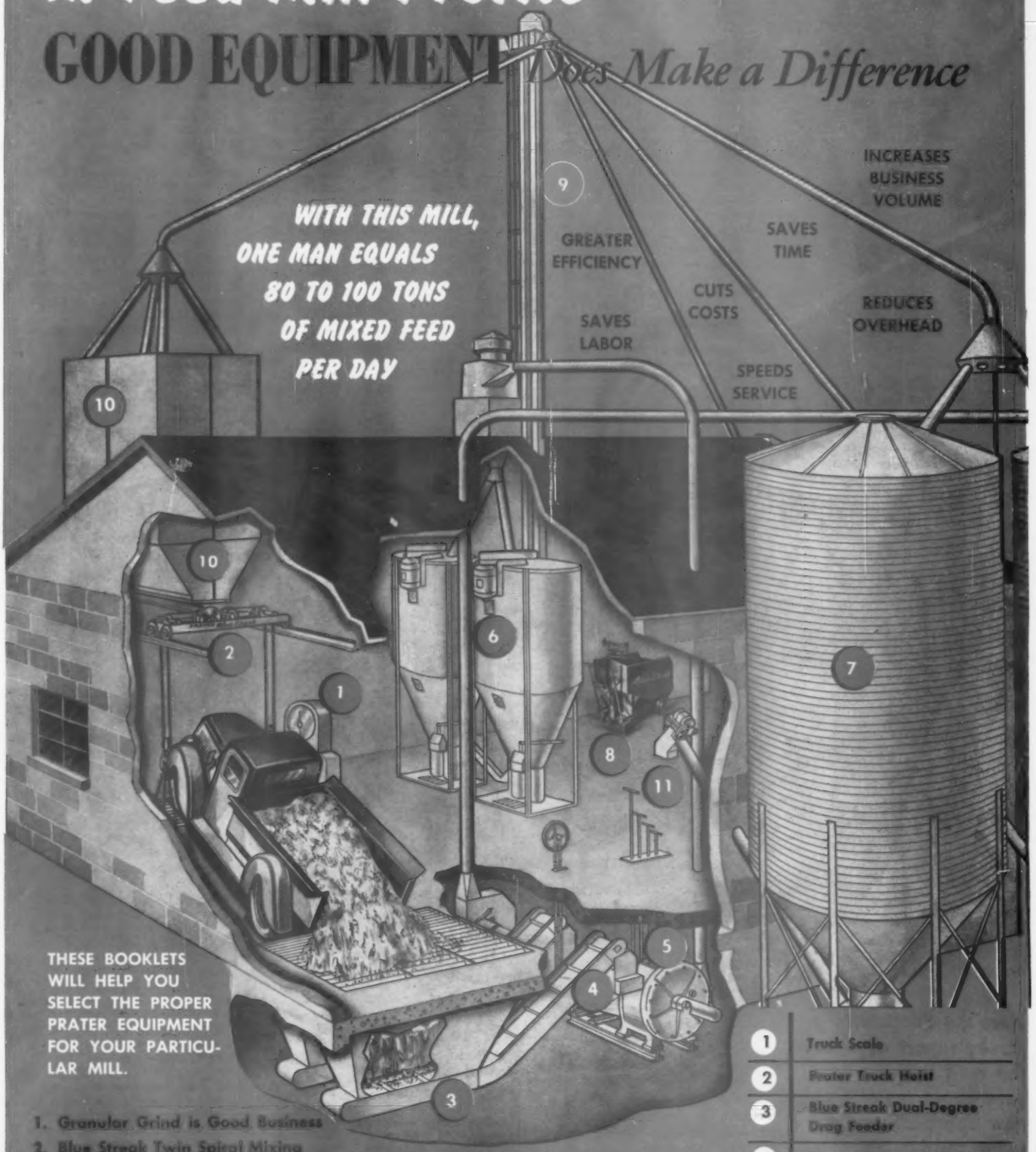

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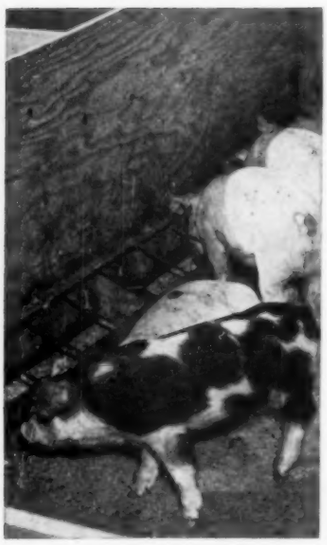
What About SPF Swine and the Feed Industry?



Here's a Feedstuffs survey report of what the feed industry says about a bold new approach to swine production and how the growth and progress of specific pathogen-free herds could be expected to affect feed manufacturing, distribution and sales.

By Jim Rutter
and
Fred E. Tunks
Feedstuffs Staff

Feedstuffs didn't know, so it asked. And it learned when it asked what nutritionists and other specialists representing Corn Belt manufacturers of swine feeds think about the development of "specific pathogen-free" (first called "disease-free") pigs and what effects large-scale SPF programs would have on the formula feed industry.

Excitement in the swine industry zoomed a couple of years or so ago when it realized that the University of Nebraska wasn't talking through its theoretical hat when it reported significant progress in a bold approach to swine disease control—an approach which involves breaking up the disease cycle between the sow and litter by removing the litter surgically and raising it under sterile conditions.

Delivery Methods

Dr. George Young of the University of Nebraska is the animal scientist given major credit for giving "disease-free" hogs their first real start in commercial production. He and his co-workers removed a sow's pigs by hysterectomy, sacrificed the sow, fed the litter in sanitary quarters and eliminated important hog diseases, particularly atrophic rhinitis and virus pig pneumonia.

As "disease-free" research progressed, a preferred term, "specific pathogen-free" was introduced because scientists believed it to be more accurate. There is no such thing as a disease-free hog, they explained, except perhaps in a germ-free laboratory. True SPF pigs are guaranteed to be free of atrophic rhinitis and virus pneumonia and are usually free of other diseases.

In addition to the hysterectomy method of delivering SPF pigs, Caesarian deliveries have been successful. The Caesarean method saves the sow and lets her raise future litters, thus reducing the cost, an important factor because there are producers, feed men and others who say SPF programs will be a long time getting established because of expenses involved. Costs go down, however, for second and further subsequent generations of SPF pigs. Veterinarian-manned clinics are the major sources of original SPF stocks.

Further Simplification

Simplification of disease-free farrowing has been tried in other ways, too.

Rath Packing Co., Waterloo, Iowa, is establishing a clean herd at its research farm by catching pigs in a plastic bag as they are farrowed and then raising them in isolation.

Dr. Roy O. Baker, product manager for Rath's feed and fertilizer division, says this method "takes more equipment than the average farmer has, but not as much equipment as is required by the veterinarian."

Last fall Beacon Milling Co., Cayuga, N.Y., had veterinarians deliver sows by hysterectomy on farms, then raised the pigs in a super-clean brooder house and garage.

Optimistic Reports

SPF pig production has attracted intense and broad interest because of reports like these:

An Iowa farmer who produces SPF hogs, Willard Dielschneider of Conrad, said at a swine production conference, "We feel that SPF hogs can do for us what hybrid seed corn did for the farmer." Feed efficiency of his SPF hogs, he said, was 1 lb. of pork produced for every 2 lb. of feed fed.

University of Nebraska researchers have indicated that SPF hogs require "about one third less feed than ordinary hogs." Also, they have shown that SPF hogs can be fed to 200 lb. in 140 days.

What Survey Indicates

Now, with that background as a start, let's go on to what Feedstuffs learned in its survey of what feed industry representatives think of SPF pig programs and what effects they think the possible growth of SPF hog herds have had or will have on their industry.

EDITOR'S NOTE: *Sources of quotations presented in this report are not mentioned because most of the survey respondents asked that their names and firms remain anonymous. This, however, does not detract from the validity, authority and importance of the opinions expressed. In fact, the opinions probably are more specific and frank because the spokesmen knew their names would not be used.*

Feed manufacturers' nutritionists, research directors and marketing specialists were asked to answer five questions. Those five questions are repeated in bold type above corresponding answers farther on in this report.

Answers Feedstuffs received indicate:

- While opinions of how far commercial use of SPF pigs will go range from extreme optimism to complete skepticism, it appears that the feed industry in strong hog production areas like the Corn Belt is preparing itself for some producer acceptance—be it little or great.

Feedstuffs' survey indicates that commercial nutritionists think of the SPF pig's future in much the same way as the university animal scientist who said, "The SPF pig approach is not the final answer—it is one step toward more efficient and profitable swine production and will only be as effective as the producers using it."

- Production of SPF pigs appears to be a significant development in the thinking of feed industry nutritionists. But the degree of importance granted this technique and how much large-scale SPF pig programs would affect the feed industry vary widely among the respondents to Feedstuffs' survey.

- Large-scale establishment of SPF herds, would, it seems, result in some commercial feed formulation changes. But, even in this area, in which many observers might guess that the greatest industry effect would most likely be felt, there is no clear-cut consensus.

- Since no one seems ready to say that SPF pig programs would reduce formula feed sales and there are some industry representatives who hold the opinion that sales would expand, it appears logical to conclude that the financial end of the industry would not be hurt and probably would be helped.

Questions and Answers

The remainder of this report is devoted to answers from survey respondents representing the feed industry:

1. Do you think that commercial use of SPF pigs will expand greatly?

ANSWER: "It does appear that interest in SPF pigs is increasing. We get quite a few requests for information about SPF pigs and also about feeding programs for SPF pigs. . . .

"There are many very serious-minded individuals coming into this program who are trying to do an outstanding job of raising these pigs and providing the necessary isolation and sanitation that is necessary to keep transfer of infection away from them. However, there are other operations in which the conditions under which these pigs are raised are such that I wonder how long they actually will stay free of the specific pathogens involved. . . . SPF pigs placed on farms under much the same environment prevalent in many so-called hog operations would scarcely remain pathogen free 24 hours.

"The principal advantage that I can see to the SPF program is that it does offer the opportunity of breaking the cycle of diseases passed from sow to pig. Once this cycle has been broken, however, the fact that it has been broken does not prevent the pig from becoming infected.

"I hope that this program grows slowly and conservatively so that the proper place of this system's production will be found in the industry. If it gets too highly promoted and attempts are made to spread it too rapidly, I am afraid we will see a lot of disillusioned people and the program could be set back significantly."

ANSWER: "We sincerely feel that the specific pathogen-free technique has a place in the swine industry. On farms where disease problems are very acute, this type of a program could put a hog farmer back in business. Also, it has some practical aspects from the standpoint of the purebred breeder who is plagued with some very serious diseases. We also feel that for the immediate future, probably for the next two years or so, we will see a very marked increase in this type of a program due to its 'fad' type of appeal."

ANSWER: "It is my opinion that the commercial use of SPF pigs will expand materially."

ANSWER: "It is our feeling that the commercial use of disease-free pigs will expand in the next few years. But it will take several years to know how widespread it will eventually become for we estimate at least five years will be required to really test the program and know how sound it will be under practical farm conditions."

ANSWER: "I think the commercial use of SPF pigs will expand greatly. Any swine breeder who does not have SPF breeding stock for sale in a few years could be left behind."

ANSWER: "It is my belief that within the next 10 years from 25 to 30% of the hogs will be produced from so-called 'disease-free' herds. This will not necessarily be from controlled herds. As you know, hogs selling under an SPF label are regulated. It is my belief that some swine producers will buy disease-free hogs and not be under any regulation. These hogs will then be sold to other farmers because of their superior performance."

ANSWER: "We are not convinced that this program is going to go one way or the other, but I personally feel after talking to many people that the commercial use of SPF pigs will be quite limited except in the hands of producers of purebred breeding stock."

ANSWER: "I do not think commercial use of specific pathogen-free pigs will expand greatly in the near future. I don't think there are enough commercial producers in serious enough trouble that they will have interest in the cost of re-population with SPF pigs. Other capital requirements in the major commercial hog producing areas are more pressing than the investment required to get into SPF pigs.

"Experience in hog problems under field conditions indicate to me that there are more economical methods of reducing losses from disease than the SPF program as it is now in operation."

ANSWER: "From a replacement standpoint or from a source of securing breeding stock with a lower or a reduced possibility of obtaining disease through this replacement or breeding stock, I think that the SPF pig may have a place in our swine economy.

"I question how extensively this will expand as the cost of this program is going to be the determining factor of its commercial application. Problems involved in maintaining an SPF herd are very great and the principle involved in this type of swine enterprise has not been in operation long enough to fully evaluate its intended purpose or application.

"If this type of a program is to become really successful, then a system must be developed whereby it will not be necessary to sacrifice the sow in order to obtain the SPF pigs."

2. What, if any, effects would a large-scale SPF pig program have on the feed industry?

ANSWER: "About the only effect I believe SPF pig herds will have on the feed industry is the possibility of creating more demand for custom mixed feeds."

ANSWER: "There appears to have arisen a belief that SPF pigs should be fed differently than normal pigs. We get requests for changes in rations that in light of any data that we have or have knowledge of do not appear necessary or proper.

"I think this is a point that needs clarification and undoubtedly will have as more research is done with SPF pigs. I do not see where large-scale development of SPF pig programs should have any great effect on the feed industry unless requests for specific rations get to be more of a problem.

"Present requests would indicate that SPF pigs are being raised where they would benefit from the use of additives. Once these pigs are placed into a re-population state on swine farms I feel quite confident that they will be exposed to organisms which are susceptible to antibiotic feeding.

"Rations properly formulated for normally grown pigs should be adequate for SPF pigs. Use of very high antibiotic levels or other disease-control feeding programs may be reduced as this program expands. However, I do not see how this would make any change in methods of feed preparation or would have any great effect on total feed sales."

ANSWER: "It is my opinion that the large-scale use of SPF pigs will expand the demand for high quality commercial feeds."

ANSWER: "Any feed manufacturer who doesn't have feeding records based on the better performance of SPF pigs won't have a convincing record-of-performance story to tell about his feeds.

"The feed saving on SPF pigs may amount to 10-25% through better feed efficiency. This may reduce the total sale of swine feed by that much. However, this should be more than compensated for by a healthier, more economical, expanding swine industry with a better product to sell."

ANSWER: "There is no indication that a large scale SPF pig program will have any effect on the feed industry. If there is an effect, it will be created by the feed industry. This will be caused by companies advertising that they have a feed designed only for SPF pigs."

ANSWER: "Any large scale program with disease-free pigs would be associated with a completely integrated program including not only the feed industry, but also the meat packing industry."

ANSWER: "I do not see where a large-scale SPF pig program would have too much effect on the over-all feed industry. Pigs from this type of a program would currently go to the better producers and these better producers are doing a better job feeding than the average run of the mill feeder. With the shift to better feeding and management which is currently taking place in the swine industry today, there should be a continued increase in the number of swine producers feeding more adequate swine rations."

ANSWER: "The greatest effect that the SPF pig is going to have is that it will sell and help re-educate the swine producers on the value of a good sound swine management and disease prevention swine rearing program."

3. Would formulation and use of additives be changed?

ANSWER: "Basic formulation would not change. Since a few hog farmers are feeding 50 gm. per ton of broad-spectrum antibiotics to maintain weight gains and feed efficiency in the presence of atrophic rhinitis, perhaps a reduction in the total amount of antibiotics with virus pneumonia and atrophic rhinitis would result. Further, since herds afflicted with these diseases are more susceptible to stress conditions, it could be speculated that a slight reduction in the amount of 'stress feeds' required for these pigs may result."

ANSWER: "Temporarily, there will be a few formulation modifications such as the preparation of some feeds without antibiotics. However, this will be temporary only as research will continue to show the value of the feed additives."

ANSWER: "Currently, where swine producers are doing an excellent job with sanitation and management, additives—antibiotics, sulfa drugs and the like—do not play too important a part. Since the type of problems that these SPF pigs eliminate are believed to be caused by virus infections and since the current antibiotics are not effective against viruses, I can see little change in the over-all use of additives except where they are currently being used to offset secondary infections caused by rhinitis."

ANSWER: "Formulation of feeds would be changed and especially so as it pertains to the use of additives. It is my thought that SPF pigs probably would not need as high a level of certain of the so-called disease controlling additives as would the regular barnyard run of pigs."

ANSWER: "It remains to be seen if the nutritional requirements will be changed. If SPF herds are established, management will still play an important part in the effectiveness or response from drugs. For example, if a group of young pigs are moved into pens which have not been cleaned from previous hogs, the young pigs will become unthrifty, even though the older hogs showed no signs of disease. This is a result of the pigs being subjected to a heavy concentration of bacteria that they are not accustomed to. These bacteria, under most conditions, would not be considered harmful."

ANSWER: "Formulation and use of additives probably will change with less use of drugs in the early stages of repopulation. However, on a farm where disease is now a serious problem, a disease buildup would rapidly occur under intensive methods of production. This possibly would require repopulation every five or six years."

ANSWER: "In general, the formulations and use of additives will not be changed since additives are not now being used for the treatment or control of those diseases that the specific pathogen-free technique is supposed to eliminate. We do not feel that the basic nutritional requirements of the animal will be modified by this technique and thus feed formulations will not substantially change."

ANSWER: "SPF pig programs could have an effect on formulation, but it will be quite small because there are not enough producers who are able to maintain SPF pigs for any length of time. A much bigger effect on feed formulation could be demanded if swine producers would only follow good sound practical swine management with the breeding stock they already have."

ANSWER: "The necessity of adding antibiotics and other drugs indiscriminately will be lessened. SPF pigs will gradually become exposed to organisms and will build up a natural antibody protective mechanism to disease. I believe a way will be found to increase the antibodies in the blood and thus make up for the lack of antibodies these pigs don't get from the colostrum of their mother.

"Drugs will be saved to fight specific infections when and if they are needed. Nutrient levels can be furnished in the feed to have the pig grow to its inherited capacity, unfettered by atrophic rhinitis, virus pneumonia and other diseases."

ANSWER: "One of the things that greatly disturbs me about the promo-

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tional advertising of SPF pigs is the fact that a number of people have stated that this pig does not need an antibiotic and that they will not respond to antibiotics.

"Actually there is no valid basis for this. In fact, the situation may be exactly the opposite. A baby pig taken by Caesarean operation has no colostrum milk and thus has no ability to build up any resistance to the organisms of the locality or of the current swine population.

"Since it is believed that antibiotics do reduce the disease level of the pig, one must postulate that this specific pathogen-free pig taken by Caesarean operation has a greater need for antibiotics and such type additives than the regular pig.

"Another factor which disturbs me greatly about this push being made by the veterinarians of the country, is the fact that just as soon as somebody develops a feed additive, whatever it might be, that is effective against certain viruses, this same type of a pig could be produced by either feeding or injecting the brood sow with the feed additive that would counteract the effect of the viruses believed to cause atrophic rhinitis and virus pneumonia. Such an additive may be a long way off, but it is not beyond wishful thinking.

"The other possibility is to develop a vaccine of some kind that will counteract these conditions. Certainly work needs to be promoted along both lines in an effort to make this type of SPF pig more practical."

4. Would there be any changes in methods of feed preparation?

ANSWER: "We feel that already there are changes in methods of feed preparation. It appears that there is going to be a definite trend toward making certain that the feeds in themselves are free from contaminants like salmonella organism, etc., and we do not feel that the SPF program will drastically change this step forward."

ANSWER: "I do not see how the use of SPF pigs would necessarily change the methods of feed preparation."

ANSWER: "I don't see where the SPF pig is going to affect the method of preparation but it could influence the type of distribution. In other words, it could increase the amount of bulk distribution that we are seeing in the swine feed industry.

"Swine producers with higher priced pigs generally like to do a little better job of feeding and this can be directly tied in to the use of a complete commercial feed preparation. The change in the method of feed preparation will follow technological changes that take place in the feed manufacturing industry as well as those changes developed by nutritionists throughout the country."

ANSWER: "At the present time I can see no change in the method of feed preparation due to SPF pig population."

5. Do you think there would be any significant changes in total feed sales?

ANSWER: "Producers who are progressive in their thinking will tend to rely on the feed manufacturer. A producer who is open to suggestion in SPF production is also open to suggestion on improvement of his feeding program. This could lead to a significant increase in sales of complete hog rations."

ANSWER: "We do not feel that the specific pathogen-free technique will significantly change total feed sales."

ANSWER: "I think total sales of hog feeds would increase. I think this would be true because with the investment in SPF pigs farmers would tend to be better feeders. Even though SPF pigs supposedly produce pork with a better feed conversion rate than other pigs, I still believe the over-all use of commercial hog feeds would increase."

ANSWER: "If there should be a large swing to the use of SPF pigs, swine producers are going to be interested in getting the lowest cost production possible," an industry representative observed. "These pigs will go into the hands of better producers and one can possibly see that there should be an increase in the manufactured feed sold. Swine producers will be less apt to try their own experimentation and will be more inclined to put their faith in one of the reliable feed manufacturers, and this could increase the total swine feed tonnage manyfold."

ANSWER: "A special feed to satisfy the needs of these SPF pigs from minus day one or more to plus seven days offers a nutritional and manufacturing challenge. It could replace the milk and eggs which are now fed."

ANSWER: "One could theorize that less feed would be used because hogs not afflicted with rhinitis and virus pneumonia convert their feed to pork more efficiently. However, I doubt that this will have any significant change on total feed sales."

ANSWER: "We do not feel that this development will have any effect on total feed sales. It should assist in more economical production of quality pork and of course with more economical production, feed sales always may increase. However, there are many factors that can affect the economics of producing pork."

New Dehydrating Firm

SIOUX RAPIDS, IOWA — Soo Dehy, Inc., began operations here recently. The corporation is composed of Hugh E. and Mildred Roberts, James and Vera Gilbert, and Hugh F. and Carol Roberts. Hugh E. Roberts is president of the corporation and Hugh F. Roberts is operating manager. The firm installed an Arnold dehydrating unit and a California pellet mill.

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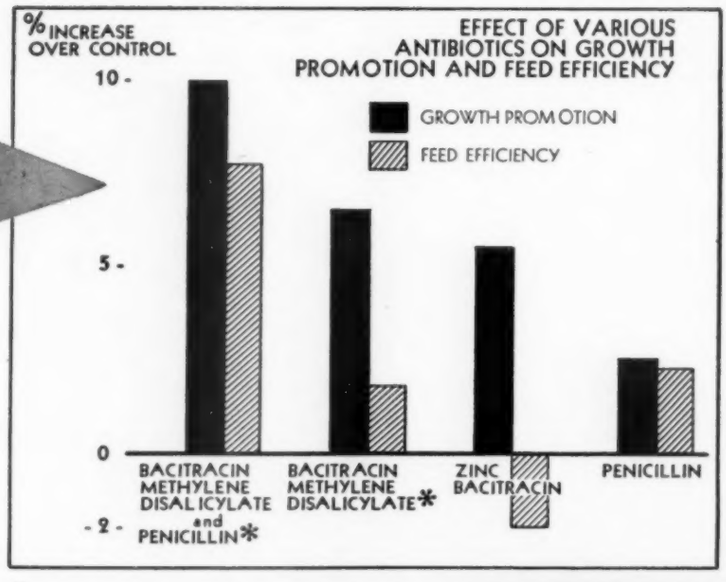

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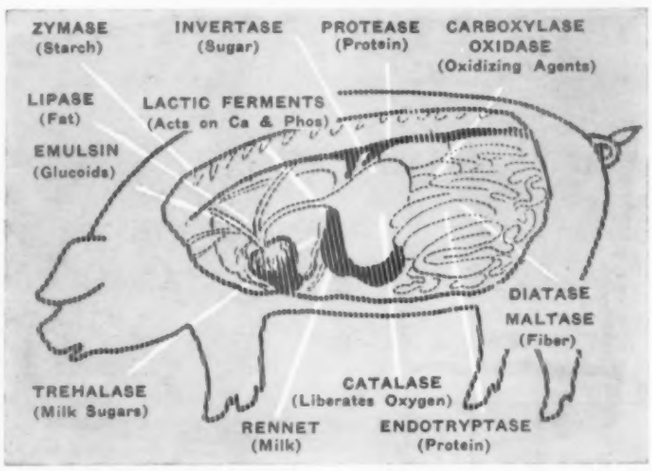
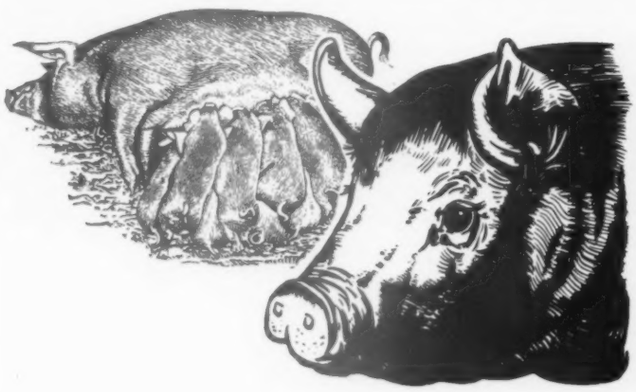
THE ACTION OF NUTRIENT DIGESTERS HELPS PIGS GROW FASTER





"ACCELERATED DIGESTIVE ACTION" GIVES FAST, EARLY GAINS — PIGS EAT SOLID FEEDS QUICKER —

GROWS HOGS FASTER — MORE EFFICIENTLY

New PIG Y-Z with "Accelerated Digestive Action" helps pigs digest feed nutrients earlier in life. New pigs get a faster start, weigh more at weaning time, and continue rapid growth. Feed conversions are lower with New PIG Y-Z. Powerful nutrient digesters help pigs break down feed nutrients. For example: Lipase, digests fats; Zymase, digests starches; Endotryptase, digests protein; and so forth.

The illustration above shows all these digesters in PIG Y-Z, and the nutrients each one digests.

Nutrient Digesters in Ultra-Life PIG Y-Z go to work in your feed formula. Pigs receive these nutrient digesters in their daily feed to achieve better utilization, faster gains, and maximum economy of production. They absorb more nutrients from the feed. Grow faster — stronger.

Ultra-Life leads the way to make these new developments available for Your Brand Hog Feeds. Look to the Ultra-Life Program for more feed sales — increased profits — from your feed production facilities. Let's Get Started.

ADD NEW PIG Y-Z TO YOUR HOG PROGRAM

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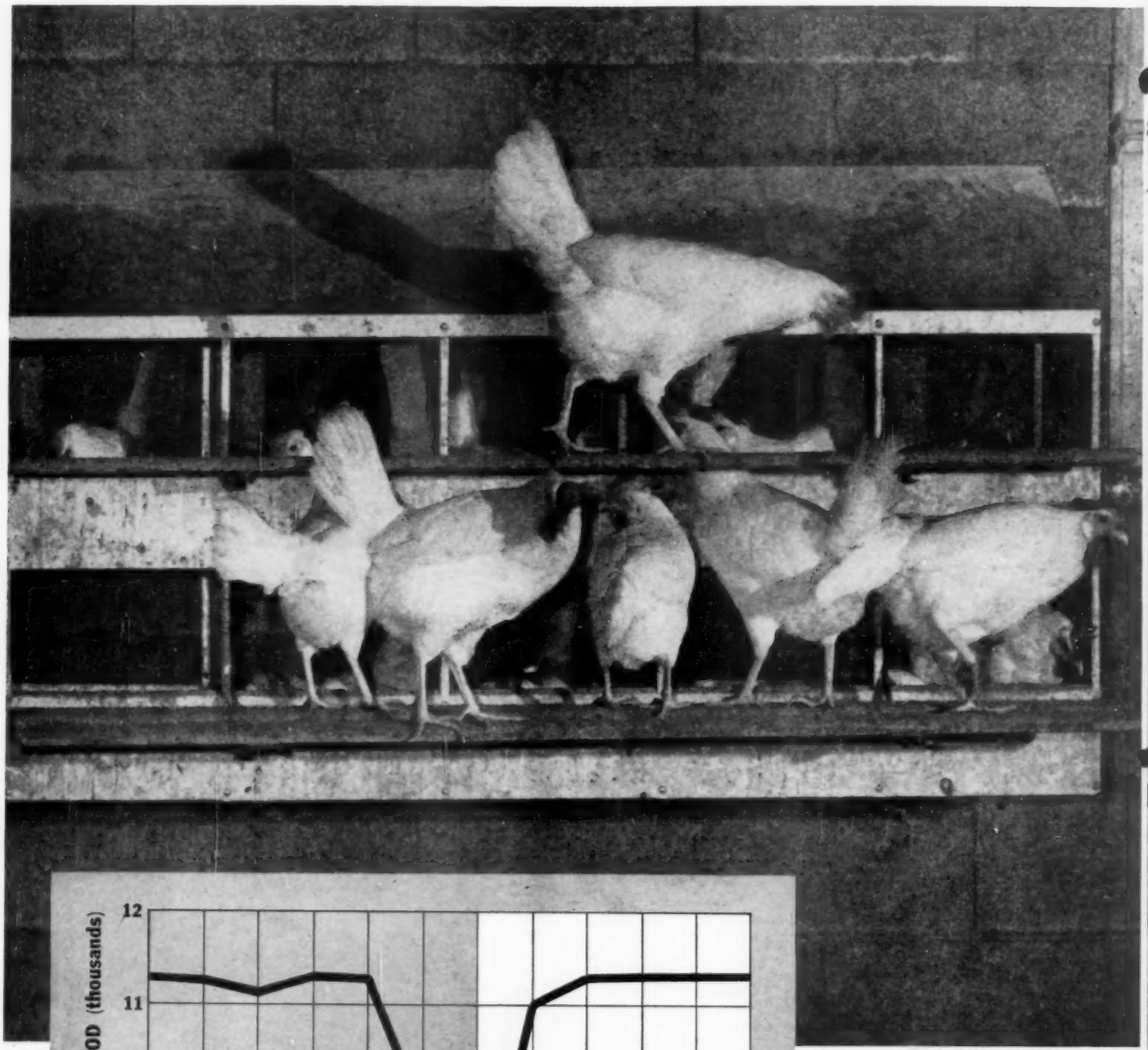

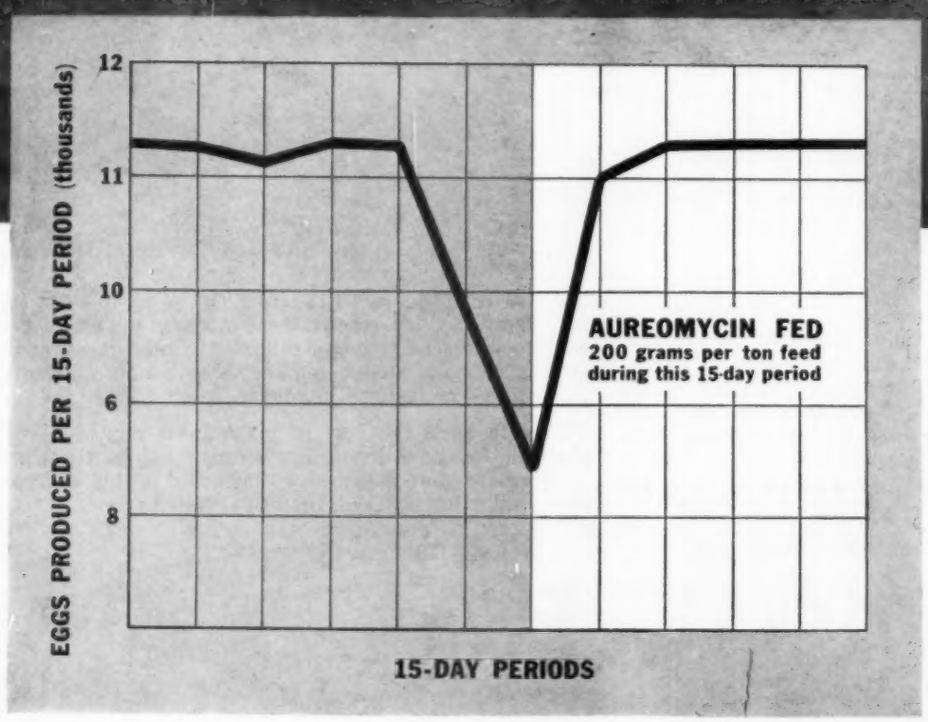

Best way to head off slumps in egg production brought on by stress is to offer your producers a well-fortified layer feed containing 200 grams of AUREOMYCIN per ton. This is an essential step in the Cyanamid Coordinated Feed-Health Program for layers.

This chart illustrates the egg production history of a flock of 1500 heavy-breed hens in Texas. Although the hens appeared healthy and no disease was revealed by clinical investigation, note the sudden drop in production over a 30-day period, followed by the rapid recovery within 15 days after the feeding of AUREOMYCIN. Note also that production remained at a high level after AUREOMYCIN was withdrawn.

HOW TO KEEP FEED INTAKE UP AND AVOID HOT WEATHER SLUMPS

When you show your producers how to do it with a special layer feed containing 200 grams of Aureomycin, you put more money into their pockets and more feed sales tonnage on your books

Your most successful egg producers keep vigilant eyes trained on feed consumption charts . . . particularly during spells of hot weather.

They know that heat stress can bring on a sharp decline in feed intake with an equally sharp drop in egg production following in its wake.

So, as soon as the feed consumption figures begin to fall off, they move in fast with efficient measures to reduce stress effects. One of the most important of these measures is a high-level antibiotic feed designed to keep hens eating.

Feed companies supply well-fortified feeds

Producers are able to take this step swiftly and profitably because progressive feed manufacturers have provided them with *exactly* the kind of feed needed to meet and correct the situation.

This is a well-fortified palatable feed containing 200 grams of AUREOMYCIN® per ton. Fed for 5 days, or longer if stress is unusually severe, this feed quickly restores birds to good health and normal production.

AUREOMYCIN at the 200 gram level provides a tremendous boost to appetite and vigor in heat-stressed or out-of-condition birds. No other drug is so effective in controlling the clinical and subclinical diseases that often follow stress.

Many feed manufacturers recommend this type of feed for all stress periods — not only for hot weather but for pullet-housing time and during extreme cold weather. They also recommend such a feed as the most effective treatment of CRD, blue comb and synovitis.

If you are not now promoting a stress feed containing AUREOMYCIN, plan to do so. It can be a production booster for your producers — and a sales booster for you. American Cyanamid Company, Agricultural Division, New York 20, N. Y. *®AUREOMYCIN is American Cyanamid Company's trademark for chlortetracycline*

The label instructions on Cyanamid products, and on products containing Cyanamid ingredients, are the result of years of research and have been accepted by Federal and/or State Governments. Always read the labels and carefully follow their directions for use.

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Shelby's TRUCK HOISTS include the exact type and size needed for your mill or elevator requirements. The famous Shelby guarantee is your assurance of speed, safety, economy. Write for complete information. Include mill or elevator description.
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Shelby manufactures a complete line of elevator and mill equipment
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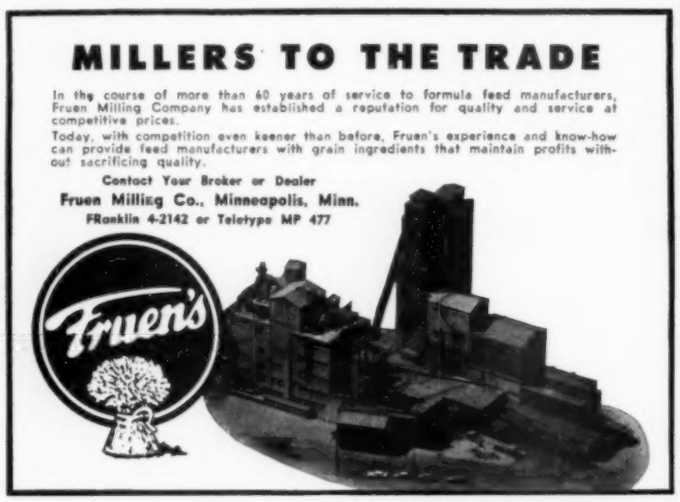
URGES INDUSTRY SELF-CONTROL—Secretary of Agriculture Orville Freeman, speaking at the third annual Summer Turkey Fair in Chicago, pledged the cooperation of the U.S. Department of Agriculture in helping the turkey industry market this year's big crop, but he also emphasized the need for the industry to exercise greater control over its production. Above, the secretary, second from the left, talks over turkey industry problems with industry leaders. They are, left to right: M. C. Small, National Turkey Federation executive secretary-treasurer; Lloyd H. Gell, Poultry & Egg National Board general manager; Carl Stout, NTF president, and Howard Kauffman, PENB president. In his talk at the event sponsored by NTF and PENB, Secretary Freeman said, "Can you imagine what would happen if the automobile industry, with little regard for consumer demand, produced as many automobiles as it possibly could in a year?" He urged the turkeymen to use all the ingenuity they can to market this year's crop.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In the course of more than 60 years of service to formula feed manufacturers, Fruen Milling Company has established a reputation for quality and service at competitive prices.
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CIBA, FAO Plan Attack Against Sheep, Cattle Diseases

SUMMIT, N.J.—Sheep and cattle diseases that annually cost the U.S. farmer an estimated $108 million will be attacked from four sides by CIBA Ltd., international pharmaceutical firm, and the Food & Agriculture Organization of the United Nations.

A joint CIBA-FAO project has been announced to "control or eradicate liver fluke disease (Distomatosis) and that caused by the tropical warble fly (Dermatobia hominis). The project will be part of FAO's "Freedom from Hunger" campaign.

CIBA will contribute: (1) the full costs of an expert's field survey in Latin America; (2) unlimited amounts of CIBA products for FAO field work against animal diseases as well as (3) for government field trials when recommended by FAO experts; (4) the costs of FAO preparation of a "much-needed" technical publication on animal disease.

The U.S. Department of Agriculture has estimated that annually the liver fluke disease causes an average cattle production loss of $3.5 million and an average sheep production loss of $4.7 million. USDA and an Iowa State University entomologist report that warble flies (cattle grubs) cause an estimated $100 million annual damage to the cattle industry.

Study Urgently Needed

Dr. W. Ross Cockrill, chief of FAO's veterinary medicine section, said of the Distomatosis study that it was urgently needed and would fill a long-felt gap in the FAO's publications on animal disease. It will be written, he said, by a world-renowned parasitologist, Dr. E. L. Taylor of Weybridge, England.

The warble fly, familiar in northern countries, has now established itself south of the Equator, Dr. Cockrill said. Rendering worthless the hides of cattle, the pest has been recently identified in Chile, where CIBA has donated quantities of its drug, DDVP, to the government for test use against the warble fly.

Final details of CIBA's agreement with FAO were conducted in Rome by Dr. Hubert Meyer, a director of CIBA, and Dr. W. Merk of the research division of CIBA in Basle, Switzerland.

CIBA's major research operation in the U.S. is located in Summit, N.J., where pharmaceutical and animal health research is conducted.

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O. A. Sasada Reelected

MINNEAPOLIS — O. A. Sasada was reelected president and treasurer of R. R. Howell Co., Minneapolis, at the company's recent annual meeting, according to D. W. Sanderson, secretary and general manager.

Newly elected as vice president is Roger D. Swanstrom, who also is president of Organic Soil Builders, Inc., St. Paul, and president of Central Lanes, Minneapolis.

Mr. Sanderson was reelected secretary and general manager.

R. R. Howell Co. distributes and manufactures well drilling supplies, and manufactures grain handling and feed milling equipment for country and terminal elevators.

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C. W. SIEVERT
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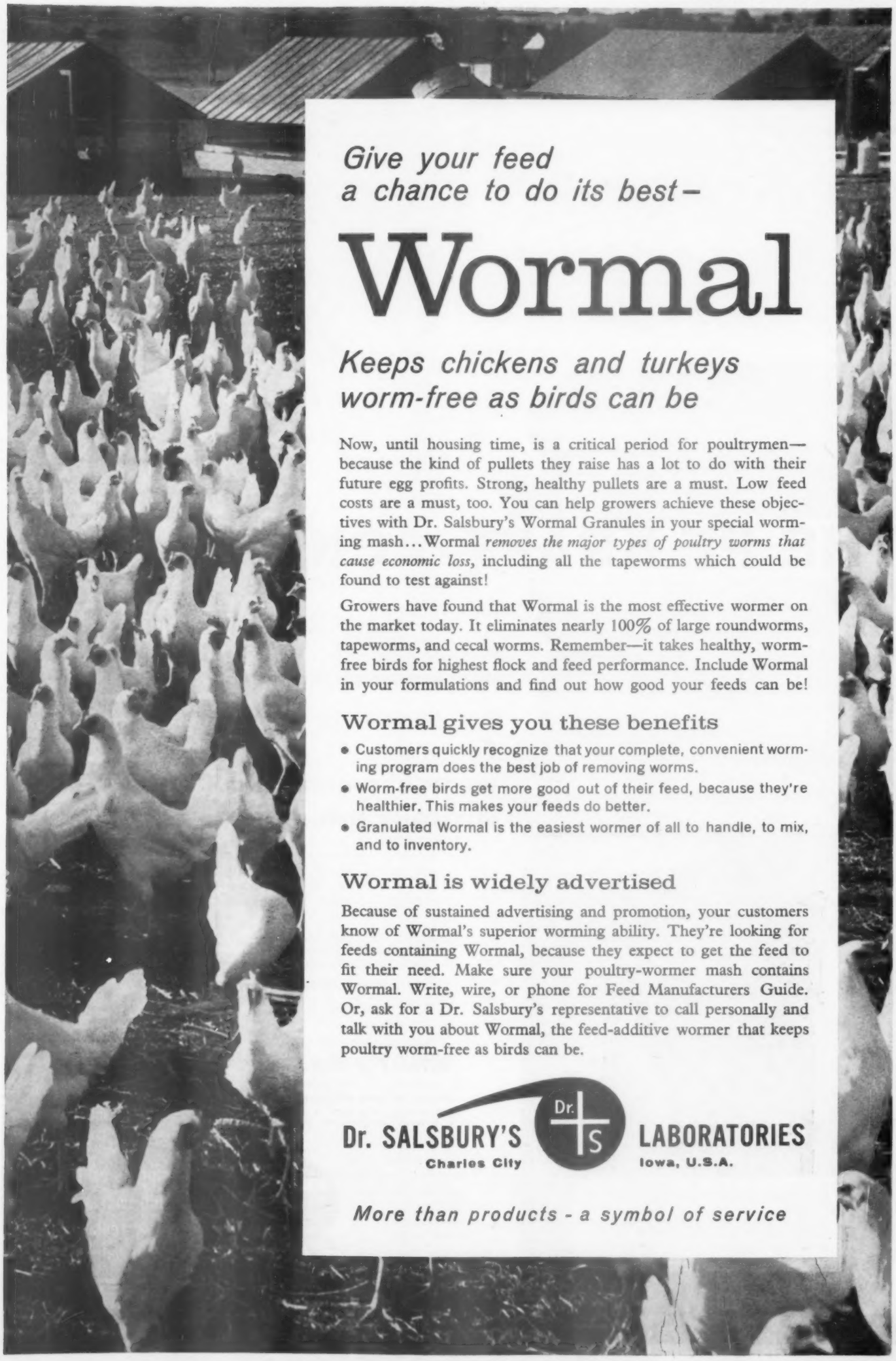
Phone Webster 9-3256 Chicago 4, Ill.



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Keeps chickens and turkeys worm-free as birds can be

Now, until housing time, is a critical period for poultrymen—because the kind of pullets they raise has a lot to do with their future egg profits. Strong, healthy pullets are a must. Low feed costs are a must, too. You can help growers achieve these objectives with Dr. Salsbury's Wormal Granules in your special worming mash...Wormal *removes the major types of poultry worms that cause economic loss,* including all the tapeworms which could be found to test against!

Growers have found that Wormal is the most effective wormer on the market today. It eliminates nearly 100% of large roundworms, tapeworms, and cecal worms. Remember—it takes healthy, worm-free birds for highest flock and feed performance. Include Wormal in your formulations and find out how good your feeds can be!

Wormal gives you these benefits

- Customers quickly recognize that your complete, convenient worming program does the best job of removing worms.
- Worm-free birds get more good out of their feed, because they're healthier. This makes your feeds do better.
- Granulated Wormal is the easiest wormer of all to handle, to mix, and to inventory.

Wormal is widely advertised

Because of sustained advertising and promotion, your customers know of Wormal's superior worming ability. They're looking for feeds containing Wormal, because they expect to get the feed to fit their need. Make sure your poultry-wormer mash contains Wormal. Write, wire, or phone for Feed Manufacturers Guide. Or, ask for a Dr. Salsbury's representative to call personally and talk with you about Wormal, the feed-additive wormer that keeps poultry worm-free as birds can be.

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Abstracts from Abroad

By Dr. Rudolph Seiden

Milk for Rearing Calves

R. A. Barton et al. studied the carcass composition of calves reared in New Zealand (Ca III). At 21 days of age one group of the calves was changed (over a period of eight days) from whole milk to reconstituted buttermilk. The calves were slaughtered when they reached a live weight of 203 lb.

Analysis showed that the fatty tissues were much heavier in the calves reared on whole milk, but the percentage of muscular tissues was significantly higher in those reared on buttermilk. There was also a significant difference in water as well as in fat percentages and in proteins and ash weights, all in favor of the calves reared on whole milk.

◆

Microflora in the Crop

De Santiago y Redel, an Italian researcher, fed chickens for 1 hour after fasting them for 20 hours (Bms 19801). Feed samples were then extracted from the crop at hourly intervals, up to 9 hours after feeding, during which period no food or water was allowed. Measured amounts of samples were seeded on Petri dishes. The pH of the crop dropped during the 9-hour period; this drop proved to be correlated with the increase in anaerobes and lactobacilli and the drop in coliform organisms and enterococci, all of which play an important role in the digestion of feedstuffs.

◆

Cows' Blood Copper Content

Blood samples from 100 cows on 17 Dutch farms were analyzed by E. E. Koetsveld, et al. (Vb 210). Mean copper content was 76.8 ± 12.2 mcg. per cent in whole blood, 89.1 ± 18.2 in plasma and 54.2±20.2 in the erythrocytes (red blood corpuscles). Values below 60 are considered as deficient.

The fluctuations in plasma copper at monthly, weekly and daily intervals amounted to 50, 40 and 12%, respectively; the fluctuations in the erythrocyte copper were even larger. The plasma copper increased when the cattle were moved from pasture into their winter quarters, but pregnancy had no influence on the plasma copper; yet, the copper values were high after calving. Feeding of copper supplements toward the end of winter housing is advised, because of the low copper content of spring grass.

◆

Atherosclerosis in Swine

Pigs fed for a year a diet containing a high amount of egg yolk developed aortic atherosclerosis six times as frequently as controls. The Canadian investigators, H. C. Rowsell, et al. (Vb 209), also found that pigs on a ration rich in butter were only half as often affected by atherosclerosis as the egg-yolk-fed animals. In addition, the latter developed much higher blood concentrations of cholesterol than the other group.

◆

Acetonemia Treatment

The Russian investigator, F. S. Poluchin, reported recently that high-producing cows which receive large amounts of feed concentrates show elevated levels of ketone bodies. If green feed is given to these animals in place of the concentrates, the blood levels become normal again. Severe cases of acetonemia are to be treated with fructose injections (Lf I).

Fructose, or levulose, forms 50% of invert sugar, together with dextrose (glucose), the other ingredient in invert sugar; it is considered a specific for acetonemia. In a (patent protected) invert sugar solution it exerts a prolonged therapeutic action, thus supporting and supplementing the quick-acting dextrose.

◆

Keeping Qualities of Carotene

The pro-vitamin A, carotene, which occurs in many natural feedstuffs, is easily destroyed. An investigation by the German scientists, H. Steger, et al., was based on various drying

EDITOR'S NOTE: *The primary purpose of this new monthly column by Dr. Seiden of Kansas City, an international veterinary pharmaceutical consultant for more than 25 years, is to present abstracts from technical papers, periodicals, books and other publications which report findings of foreign research in animal nutrition and animal health of particular interest to the feed industry in the U.S.*

Dr. Rudolph Seiden

Although complete references to source material may not be included in Dr. Seiden's abstracts, additional information may be obtained by writing to the author at 700 East 63rd Terrace, Kansas City 10, Mo.

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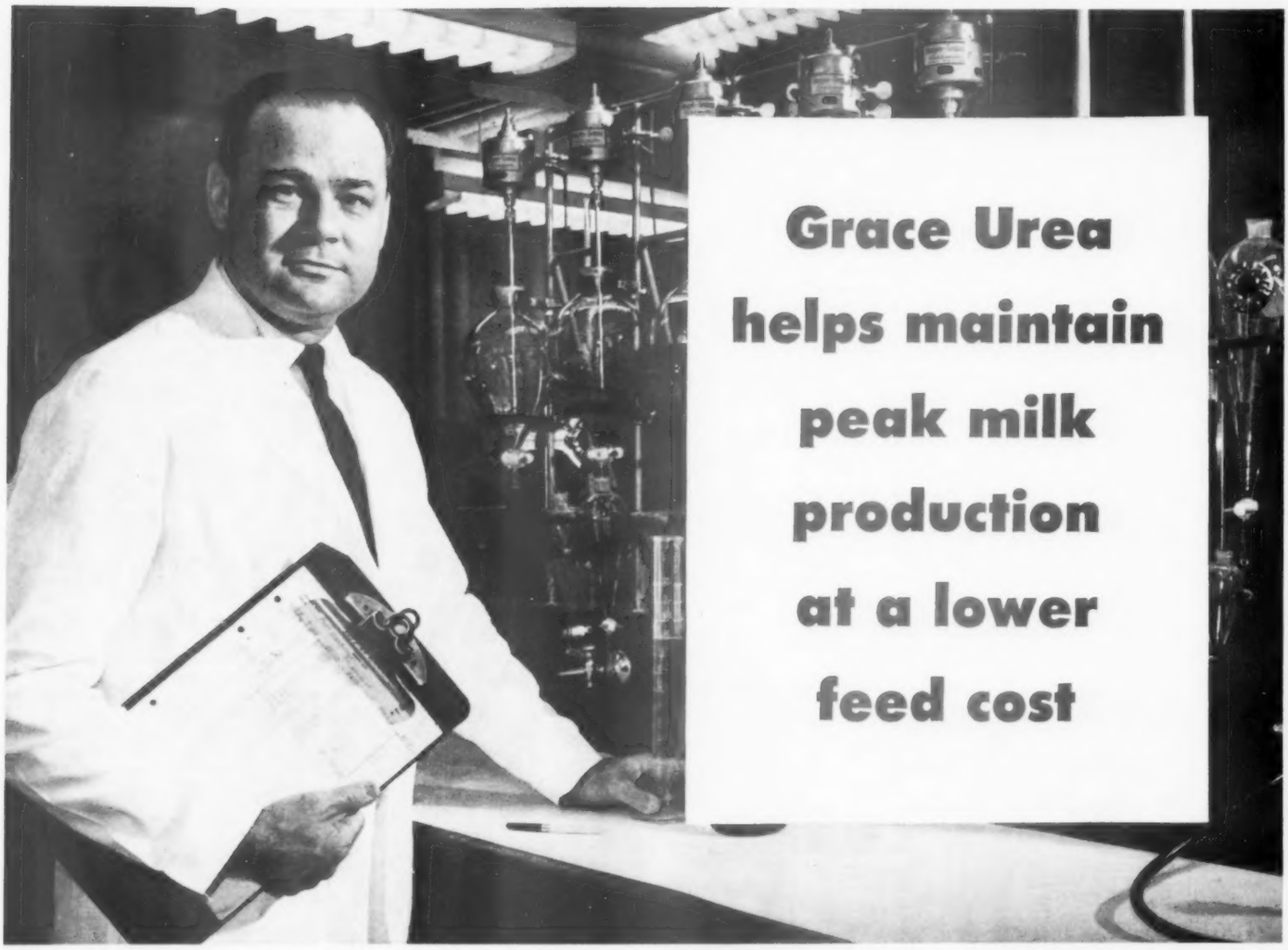

Dr. J. D. Aughtry, Manager of Agricultural Service, W. R. Grace & Co., Nitrogen Products Division, whose booklet on dairy feeds is now available.

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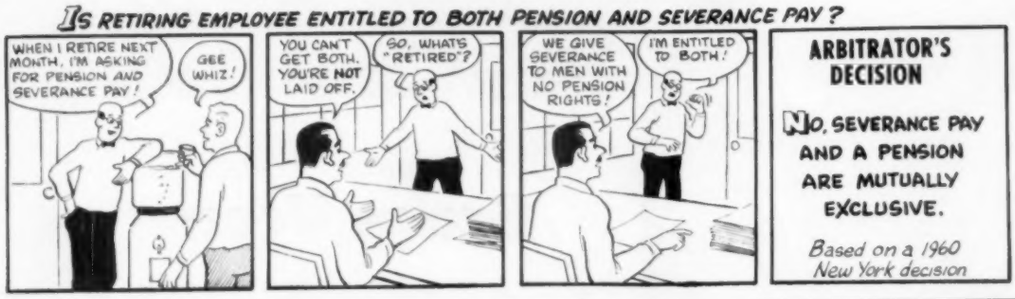
Latest Rulings in Labor Relations

IS RETIRING EMPLOYEE ENTITLED TO BOTH PENSION AND SEVERANCE PAY?


WHEN I RETIRE NEXT MONTH, I'M ASKING FOR PENSION AND SEVERANCE PAY!
GEE WHIZ!
YOU CAN'T GET BOTH. YOU'RE NOT LAID OFF.
SO, WHAT'S "RETIRED"?
WE GIVE SEVERANCE TO MEN WITH NO PENSION RIGHTS!
I'M ENTITLED TO BOTH!
ARBITRATOR'S DECISION
NO. SEVERANCE PAY AND A PENSION ARE MUTUALLY EXCLUSIVE.
Based on a 1960 New York decision

and storage conditions of such green feeds as rye, pasture grass and various clovers. The artificially dried materials were stored (1) in a refrigerator at 4° C. (close to 40° F.), both in burlap sacks and in moisture-proof bags, and (2) in a roof storage room at normal temperature, in moisture-proof bags, and also in burlap sacks. Milled as well as unmilled feed materials were used in these experiments.

After 60, 124, 232 and 303 days the carotene contents of all samples were determined. There was less loss in the unmilled samples than in the others; and cool storage was preferable, as was storage in burlap sacks rather than in moisture-proof bags.

It is concluded that drying to not less than 13 or 14% moisture content is to be recommended, as is storage of carotene-containing feed material in loose form, which permits the normal humidity of the air to preserve the vitamin content of the feedstuff.

◆

Pig Ration Supplementation

In Great Britain, D. B. Bellis supplemented bacon pig diets with copper or Aureomycin (Ca III). A total of 288 pigs were fed ad libitum until they reached from 40 to 100 lb. of body weight. They received restricted feed thereafter, until they reached bacon weight (200 lb.).

Growth rate was increased by both copper (125 or 250 ppm) and Aureomycin (14.4 ppm) when made available during the ad libitum feeding period. Later on, during the fattening stage, from 100 to 200 lb., the addition of 125 ppm copper or of the antibiotic increased the food conversion efficiency; and 250 ppm copper improved the growth rate also.

The liver copper content of pigs fed 125 ppm copper was three times higher than that of the controls, but 250 ppm copper increased the liver copper storage 18-fold.

Foxbilt Feeds Offers Poultry Housing Plan

DES MOINES — A package poultry program including a laying house is being offered by Foxbilt Feeds, headquartered here.

The program is called the PAL (Pay After Lay) Poultry Package and includes: Pullets, feed, house, equipment, credit and management. Foxbilt, Inc., cites the plan as a means of getting feed customers into the poultry business on a larger and more profitable scale.

Purchase of the new house is not essential to the program, the firm points out. It says that the farmer may already have suitable housing or may remodel a building already on the farm.

The basic house offered is 36 by 48 ft. with additional 16 ft. sections available. The basic house will accommodate 1,300 pullets, the firm says. The house with regular equipment is priced at $3,500 within a 100-mile radius of Story City, Iowa. Workroom, cooler and automatic equipment are available at extra cost.

The financing portion of the program is as follows:

The house and equipment are eligible for a $3,500 loan for three to five years, leaving little or no down payment unless substantial automatic equipment and accessories are added to the basic building.

Chicks purchased on the PAL plan require 12¢ payment per chick with the order and the balance as follows: 14¢ due at nine months, 14¢ at 12 months and 13¢ due at 15 months. There is a bonus to the customer of 8¢ per pullet at the end of the contract period for following the feed and management programs.

Foxbilt's "Super Chick" starter for 30 days and "Chictrate" premix for five months are financed. Payments are in five equal parts starting the seventh month after hatching (flocks of 1,000 or larger).

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POUR-ON GRUB KILLER — Jack Ivey, Indio, Cal., cattle feeder, and Dr. Louis Riehl demonstrate one method of applying ruelene to cattle to combat cattle grub. Under this system, the chemical is mixed with water in a pail and ladled onto the animal's back. It works its way into the animal's system and kills the grub before the insect can make holes in the hide.

Californians Report on Cattle Grub Research

SAN FRANCISCO — Experiments with a new feed additive have shown the additive to be effective in killing cattle grubs, according to three researchers.

The additive, known as ruelene, was reported to be 100% effective in one case, and almost as effective in a second trial in southern California.

The three researchers are Donald Addis, farm advisor of Riverside County; James Burgess, farm advisor of neighboring Imperial County, and Louis Riehl, entomologist at the Citrus Experiment Station of the University of California, Riverside.

Mr. Burgess also reports good response from feedlot operators to the ruelene method when used alternately as a pour-on. Under this system, the chemical is mixed with water in a pail and ladled onto the animal's back. It works its way into the system and kills the grub before the insect can make holes in the hide.

Jack Ivey, Indio cattle feeder, cooperated in the experiments, as well as several other livestock raisers.

The systemic Trolene has also been used successfully as a bolus. A third, Co-Ral, is applied externally as a spray.

Cattle grubs are the larvae that develop after heel flies lay eggs on the heels of cattle. The developing larvae migrate through the body to the back of the animal. As they emerge from boil-like swellings underneath the skin, they make large holes in the hide.

BRAKE FAILURE

LIBERTY, ORE.—A brake failure on a fork lift truck was blamed for the loss of the vehicle at the Benjo Milling Co. here. The truck was starting to unload waste into a burning pit when the brakes gave out, officials said. The vehicle was valued at $12,000, and the total damage has not yet been determined. Driver of the truck, George Camden, escaped with no apparent injuries.

Membership Quota Met

PORTLAND, ORE.—The board of governors of the Oregon Feed & Seed Dealers Assn. has approved 10 applications for full membership rights into the organization.

At the start of the official association year in March Jim McDowell, president, established a quota of 10 new members for the year, and those approved fulfill this goal.

New members are: Mory's Feed & Supply, Rainier; Heinies Cash Feed Store, St. Helen's; North Powder M & M, North Powder; Union County Grain Growers, Inc., La Grande; Farmers Feed & Seed Co., Nyssa; Calcium Carbonate Co., Quincy, Ill.; Glen Fravel, Inc., Salem; Gro-Mor, Inc., Salem; Washore Turkey Assn., Portland, and Round Butte Seed Growers, Culver.

Chairman of the association membership committee is Rod Wissler, Chase Bag Co., Portland.

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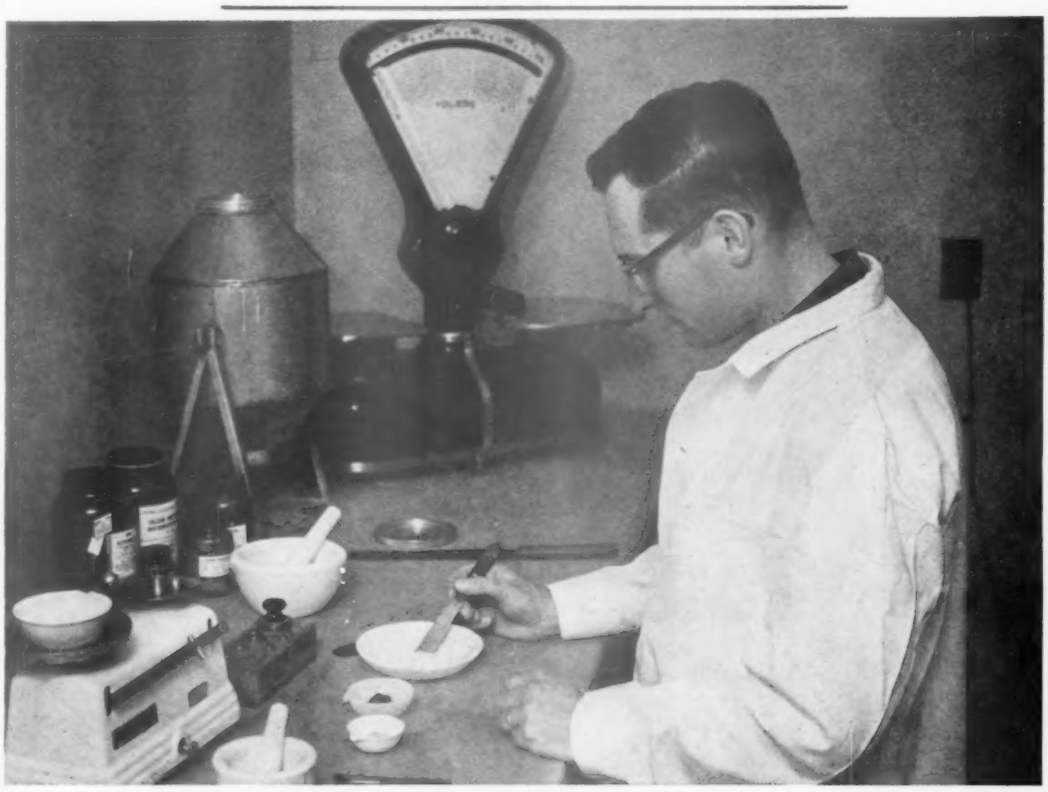

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Putting Research To Work

BY SPENCER H. MORRISON, PH.D., D. V. M.

Report on Selected Papers from the Annual Meeting of the American Dairy Science Association

PART 3

APPLIED GENETICS: Menge et al., University of Wisconsin—Some veterinarians and artificial breeders have been concerned about the possibility of non-specific uterine infections as causes of lowered breeding efficiency in cattle. The Wisconsin group used artificially induced uterine infections from live cell cultures of E. coli, S. aureus and C. renale with no evidence of the repeatedly induced non-specific uterine infections causing any carryover effects and with little effect on breeding. Normally, many cattle do not breed on first service, and in this trial six heifers bred on first service, with the remaining two requiring another breeding. Although good sterile techniques are obviously desirable in artificial inseminations, we do not apparently need to be overly concerned with the slim possibility of artificial infections if normal precautions are taken. Apparently, the animal has a good built-in defensive mechanism against such infections, etc.

Estrous and Ovulation Control—A joint symposium was held in this field under the title of "Recent Advances in Reproductive Efficiency" with the following participants: W. Hansel, Cornell University, "Estrous cycle and ovulation control"; N. VanDemark, University of Illinois, "Artificial insemination," and L. Casida, University of Wisconsin, "The present status of the repeat breeding problem."

Furthermore, several papers on this and related subjects were presented in several of the breeding sections by institutions such as Arizona, Cornell, Georgia, Louisiana, Missouri, New Jersey, Michigan, USDA (Beltsville) and the Upjohn Co. Obviously space does not permit a review of all of the interesting reports and only the very general conclusion can be made that while progress is being made in the field of synchronization of estrous cycles and ovulation, much still remains to be done before the information can sift down to practical day-to-day farm operations.

One of the more interesting aspects of this work as far as the feed industry was the two reports (Cornell and Upjohn) concerning the feeding of 6-a-methyl-17-a-acetoxyprogesterone (MAP) at varying levels (0.2 to 0.8 mg. per lb. of body weight for 20 days) to dairy heifers. The results with the two groups were quite similar and indicate that a large percentage of such treated animals will be in estrus on about the third to fourth days after cessation of feeding the additive or after lowering the daily dose to 0.05 mg. per lb. of body weight per day. Conception rate of treated animals does not appear to be adversely affected within dosage ranges. At Cornell, a combined treatment which involved feeding of MAP at 0.4 mg. per lb. of body weight per day for only 10 days and placing self-retaining catheters in the uteri of all animals that had been in estrus within five days prior to the beginning of the feeding period, also produced good synchronization of cycles.

Another interesting conclusion from Hansel's paper is "Attempts to produce synchronous estrus in groups of cattle with progesterone injections or implants, or by combined progesterone and gonadotrophin injections have usually resulted in lowered fertility in cattle bred at the artificially regulated estrus."

Carter, Cornell University—It is imperative that artificial breeding stud managers obtain proof of young sires quickly. Some of these organizations have therefore contracted with selected dairymen to breed a certain percentage of their herd to such young unproven sires. Evidence obtained by this worker suggests that young sires can be sampled in such selected herds and still be ranked with a reasonable degree of accuracy, especially if extremely high or low

(Turn to page 42)

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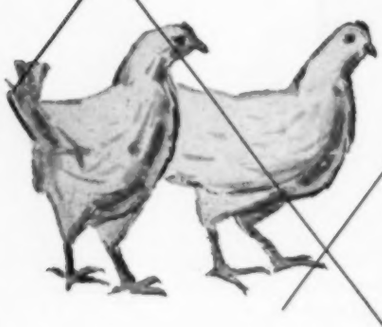

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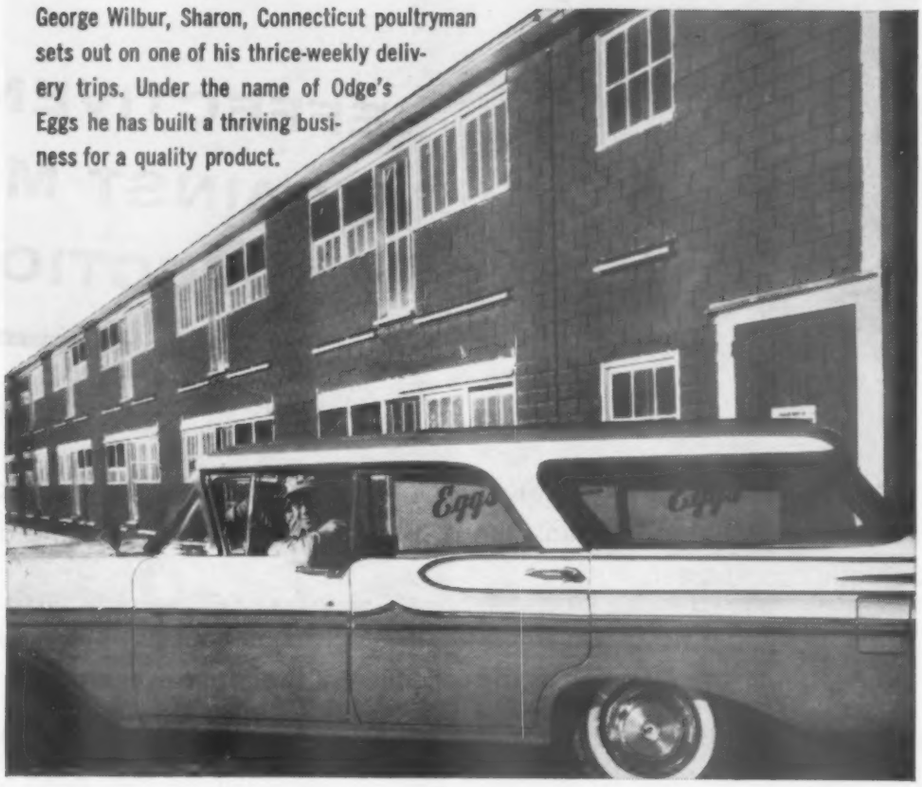

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MONTH	DOZEN EGGS	% PRODUCTION	POUNDS FEED	POUNDS FEED PER DOZEN
Feb.	1661	66%	(no record)	—
Mar.	2431	90%	10,200	4.19
April	2299	88%	9,675	4.20
May	2215	82%	9,388	4.24
June	1985	76%	8,787	4.42
July	1865	69%	8,175	4.38
			Five Month Average . . .	4.286
			Eggs per bird housed (6 months):	143.7

He fed Wirthmore Chick Starter SQ for 8 weeks;* Wirthmore Grow & Egg & Scratch (60-40) to 16 weeks; Wirthmore Hi-Ener-G Layer Arsan 16 weeks on.

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producing herds are not used for such sampling procedure.

Johnston et al., Louisiana Agricultural Experiment Station—Preliminary data secured by this group suggests that metabolic adjustments to hot climates were not complete even after 30-40 days, even though dry matter intake and growth rate had returned to normal. For a long time, southern dairymen have been aware of the fact that older heifers and cows adjusted poorly to their conditions when transported from more temperate regions. On the other hand, young calves kept under good conditions seem to adjust to such heat induced stress somewhat better and produce better as cows. Perhaps the Louisiana workers are on the threshold of discovering some of the basic causes of poor results with older animals. It would be interesting to extend this research to younger ages and follow the results in terms of lifetime production.

In this connection, over the years, the Missouri group has been the fountainhead of such research, and the latest results indicate great individual ability to withstand heat and humidity. Thus, it seems conceivable to breed within breeds for such tolerance. One of the most upsetting things in dairy cattle breeding as far as I personally (SHM) have been concerned, is the confounding of good high producers (Holsteins, etc.) with crossbreeding, using Jersey, Sindhi, etc., animals which are often of poorer ability. More work is certainly needed to breed within Holsteins, etc., for heat tolerance as well as high production. With natural grazing advantages for the South coupled with cheap labor, dairying can become profitable if cows of good producing ability can be secured. Lest anyone misunderstand, I mean by "good producing ability"—a level of 14,000 to 16,000 lb. of 4% FCM per cow—far above that achieved by southern dairymen today, but which is being achieved in many other sections by more progressive operators.

PHYSIOLOGY — Many good papers were given in this section (other than on environmental physiology) but were of primarily technical interest. However, a report by **Ward of the Los Alamos Scientific Laboratory, University of California,** shows that milk produced by cows fed in areas dependent primarily on permanent or infrequently cultivated pastures and grass hay have higher fallout levels of cesium[137] than that produced by cows dependent on cultivated pastures, alfalfa hay and corn silage. It should be noted, however, that the highest levels of fallout reported were less than one-thousandth of the maximum permissible concentration.

Freeman and Roache, Iowa State University, have submitted further evidence on the fact that judging by itself is a poor measure of the productive ability of dairy cows. Thus, this reinforces recent data to this effect by the USDA (1960). All body measurements used by the Iowa workers were of low predicting ability when compared with the two-year old milk production. As men become wiser and the dairy business becomes closer margined, less emphasis is constantly being given to a cow's "looks" and much more is being given to "what she puts in the pail"—certainly about time, too!

CALF NUTRITION—Rust et al., Iowa State University — Ninety-six calves were used in three experiments to evaluate the effect of Miles Chemical Co. enzyme concentrates when added to dry calf starters comprised of: 40 lb. coarsely ground corn, 27 lb. crushed oats, 20 lb. soybean meal, 10 lb. molasses, 1 lb. iodized salt, 2 lb. dicalcium phosphate and 68 gm. trace mineral mix. All starters were fed free choice and supplemented with 70,000 I.U. vitamin A and 8,800 I.U. vitamin D weekly. No hay was fed.

In the first experiment, calves fed a mixture of proteases, amylases, and amyloglucosidase gained 1.49 lb. daily to 12 weeks, as compared to 1.26 lb. for controls. Autoclaving the starter before adding enzymes did not affect the response. In this experiment, the enzyme supplemented calves were fed the following enzymes added to each pound of starter: 100 mg. fungal amyloglucosidase and 50 mg. each of bacterial amylase concentrate, bacterial protease concentrate, fungal amylase concentrate and fungal protease concentrate.

Further results obtained from experiments 2 and 3 indicated that a growth response could be obtained when only the bacterial protease concentrate was fed with 40-50 mg. per lb. of starter giving best results and 100 mg./lb. depressing growth. Bacterial amylase concentrate had no apparent effect, and amyloglucosidase depressed growth. The increased rate of gain was accompanied by slightly increased starter consumption and slightly less feed per pound of gain.

In the second trial, free-choice alfalfa hay was fed after 12 weeks of age for a period of 12 weeks. Average daily gains from 12 to 24 weeks were 1.87 lb. for calves fed bacterial protease concentrate (50 mg./lb.) and 1.71 lb. for controls.

This is further evidence that one must not merely talk of "enzyme" supplementation for farm animals. Rather, we must learn to think in terms of specific enzymes at specific levels for best results. This is an area which will see much research in the next few months.

Nelson (Dairyland Food Laboratories, Waukesha, Wis.) and House and English, Midwest Research Institute — Pregastric esterase (PGE) alone and in combination with Terramycin (Pfizer-R) were tested under practical farm conditions as therapeutic agents for the treatment of non-specific scours in calves. In the case of the 93 milk-fed calves tested, the 42 scouring calves which received a combination of 0.8-PGE-oxytetracycline (containing 482-902 units pregastric enzyme and 166-312 mg. antibiotic per dose) 97% were cured in an average time of 2.2 days. Of 15 other scouring calves which received pregastric esterase alone, at the levels as above, 86% were cured in 3.7 days. Of 12 other calves given lower doses of pregastric esterase, 58% were cured in 3.2 days. On the other hand, of the milk-fed calves, a control group receiving just placebos, only 29% recovered from scours, and another 29% died in a 7-day period. Thus, from this data it would seem that pregastric esterase, a fat-splitting enzyme naturally secreted by certain tissues of the bovine, is highly effective in curing scours of milk-fed calves. The addition of the antibiotic further enhanced this response.

It should be pointed out, however, that when scours were contracted by calves being raised on milk replacers, the response from the pregastric enzyme treatment was quite erratic. About 66% of the cases were cured on an average daily dose of 1.6 oz., but with a much longer period required for medication to achieve the response—namely, 5.3 days.

Lassiter et al., Michigan State University — Under the conditions of their experiment, there was little or no advantage gained by the addition of spiramycin, Aureomycin or a combination of the two to a limited-milk-starter ration for young calves. Feedmen should not be upset at these results, as I have repeatedly pointed out in this column on several occasions, results with antibiotic additions may be quite different under practical farm conditions as contrasted to college research under carefully controlled conditions.

Noller et al., Purdue University, conducted a very interesting experiment concerning the levels of hay and starter to be fed calves starting at eight days of age, with calves being weaned at 21 days of age, and kept on experiment until 70 days of age. This work bears out the important fact that apparently pretty good results with calves can be obtained with rather widely varying feeding programs. This is contrasted with the previously reviewed paper by Brown and Lassiter of Michigan showing that protein-energy relationships were important in dairy calves when the starters had varying composition but having alfalfa hay incorporated as an integral part of the starter (at the 25% level). The discrepancies between the Michigan paper and the Purdue one will have to await further work. Actually, from a practical standpoint, as long as calves gain at the rate of approximately 1.1-1.4 lb. a day (for Holsteins) during the period eight days to about 70 days, little real practical difference can be shown later in life for different methods of calf raising. In other words, this may be "much ado about nothing"—the animals have unique ability to compensate for early growth patterns later in life providing they re-

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ceive sufficient total feed. One should realize, of course, that the early incorporation of coarse material into the diet is a means of forcing young calves to eat more hay and thus initiate early rumen function. But, whether or not this actually is too important as far as the mature cow is concerned is entirely up in the air. Obviously, use of hay will cut costs.

BLOAT—Three papers were concerned with the problem of bloat and the effect of pectic and mucin substances on the condition. The **Kansas group (Bartley and Yadava)** demonstrated that increasing animal mucin levels to 300 gm./cow improved the protective levels of the mucin for up to six hours. Previously used levels of 50-75 gm. per cow only gave protection for up to four hours. Cellulose cubes, impregnated with mucin in an attempt to extend their protective life, were less effective than dry mucin. Another study by the **Kansas workers (Fina et al.)** has postulated that the mucin present in normal salivary secretions will prevent bloat if it exists in sufficient amount. However, if there is reduced salivation during the consumption of bloat provoking diets, or if the mucin is destroyed by an excessive concentration of rumen bacteria which degrade and utilize mucin, then bloat will follow.

The Ohio researchers (Conrad and Dehority) demonstrated that the polyuronides which are precursors of rapid ruminal gas production and sources of acid soluble pectins are the primary plant compounds contributing to pasture bloat. It will be recalled by many that several years ago the USDA proposed that the chief substance responsible for bloat in such pasture bloats was often saponin. Now it seems, that another compound must also be considered. And so goes it! I'm confused—are you?

KETOSIS — Radloff and Schultz, University of Wisconsin, conducted an experiment with 50 cows to determine if the feeding of lactates would prevent ketosis. An average of 1.21 lb. of lactates (Western Condensing Co.) was fed per day to one-half of the cows for six weeks postpartum. Unfortunately, the incidence of ketosis was low in both cow groups and no worthwhile conclusions can be drawn other than the fact that the production level was not affected by lactate feeding.

FORAGES — Olson and Voelker, South Dakota State College — Ten pounds of an enzyme culture (ENSIL-AC, from enzymes of A. oryzae and combinations of lactic acid culture bacteria; Dr. Macdonald, Vitamized Feed Co., Ft. Dodge, Iowa) were added per ton of wilted first cutting alfalfa at time of ensiling and compared with untreated material. On the average, daily silage consumption by milking cows was in favor of the enzyme treated silage. In the case of heifers, 16% more weight (non-significant) was put on by those receiving the enzyme silage. No significant differences were seen in 4% F.C.M. production by cows on the two forages, but a slight trend for enzyme cows to produce at a slightly higher rate can be seen from the data.

In the case of pilot-treated haylage (200 lb. drums), 11 calves gained 2.06 lb. daily while controls only gained 1.64 lb. Solid carbon dioxide at 25 lb. per ton, used to inhibit plant cell respiration, increased silage consumption, but did not improve weight gains of calves.

Browning et al., Mississippi State University, showed that considerable difference may exist in the feeding value of grain sorghum silages when compared with corn silage of low grain content. In a milking trial, the silage dry matter consumption per 100 lb. body weight was 1.22 lb. for the corn silage, 1.38 lb. for the NK 300 sorghum silage and 2.24 lb. for the RS 610 sorghum silage. For the same silages, respectively, the average daily FCM was 25.9, 25.7 and 21.1 lb. The corn used was Dixie 55, while the NK 300 sorghum was described as an intermediate forage type sorghum and the RS 610 was combine type sorghum.

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FEED CONTROL COMMENT

By BRUCE POUNDSTONE
Secretary, Association of American Feed Control Officials
Kentucky Agricultural Experiment Station, Lexington

Overprinting, Side Bar Labeling and Identification Numbering Systems

The feed bag label primarily conveys information to the purchaser. It is assuming more and more importance as a means of identifying products in manufacturing and storage. To be sure, this has always been true. Formerly, however, the bag makeup and type of bag helped to identify feeds. This is less so today. Now the tag alone is often relied upon.

The wide variety of feeds offered for sale, even within a given category, make close scrutiny of the tag necessary if those handling the feed are to be certain to always have the correct feed. With wide variation in names and some of them rather involved, this can become time-consuming.

Faster Movement Sought

Coupled to this, manufacturers are constantly trying to find ways of speeding up the movement of bagged products. Quick identification becomes all the more desirable.

Accounting and billing now have been assigned to electronic data systems in many companies. Code numbers thus become essential. Translation of the names of many feeds into as many codes represent a further time-consuming operation. A code appearing on a feed label permits handling within the plant and warehouse in the same terms as billing and accounting. Not only is time thus saved, but another chance of error avoided. "Coding" becomes unnecessary.

Some companies still insist upon using a considerable portion of their tag for displaying their trade mark or trade name or other company identification systems. This further adds to the matter that presses for attention on the feed label.

All of this is in addition to the legal requirements of listing of the name of the feed, the manufacturer's name, the chemical guarantee, the ingredient list and the net weight.

With pressures from all sides to get information on tags, it is not surprising that some of these tags become rather involved. Control officials are cognizant of these various needs. We must, however, insist upon a balanced approach so that essential information is not obscured and the basic purposes of the feed label maintained.

OVERPRINTING—Various devices are being used and suggested by companies to meet the needs of this situation. Overprinting is one of these. Some of the information is overprinted on the label in a lighter color or shade.

This is occasionally done in an acceptable fashion but by and large is unsatisfactory. A light colored bar across a tag works fairly well. A company soon runs out of light shades of color, however, and in an effort to continue with this system they often get into heavier colors. These become so heavy as to obscure or make difficult the reading of the information.

The same is true where words or symbols are overprinted. Light printing works fairly well but reading of either the over or underprinting is difficult.

Although each case of overprinting must be considered on its own merits, by and large this is the least satisfactory of the methods in use and proposed thus far.

LETTER AND NUMBER DESIGNATIONS—Use of a number or a combination of numbers and letters has also been resorted to. Confusion exists here if the letters selected can in any way be related to a drug or any quality of the feed. This becomes an added problem if the numbers are such as to suggest potency of a drug or of vitamins or other quality.

Coupled with this is the fact that numbers in the name of a feed have always been acceptable as referring to protein content. As such they need no further qualification. If they do not refer to protein, more confusion is created.

CODE NUMBERS—Coupled with this is the need for a code number that agrees with an accounting system code number. This has led to a suggestion developed at Chicago in May that where it is felt necessary to have a code number, such numbers be limited to numerals and none of the alphabet be used. Also, it was suggested that a four digit number be employed. This would have little chance of being confused with either a protein guarantee, the level of a drug or vitamin content.

Some now using the alphabet in this connection felt this would represent a hardship to them but nonetheless this is the proposal and control

(Turn to page 51)

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NEW PRODUCTS DESIGNED BY LANDERS

Landers 3 Piece Die Clamp and 45° Driving Rim

Eliminates the 8 studs on standard die housings that break so easily. Saves hours of downtime. 45° driving rim prevents spread of clamp legs.

LANDERS MACHINE COMPANY
LANDERS MILL MANUFACTURING COMPANY
207 EAST BROADWAY
FORT WORTH, TEXAS

SOLD! fine, but what about reorders? Here's your answer in . . .
FPI: the feed promotion idea that continues selling after your feed leaves the store

Here's one feed promotion idea that never drags its feet . . . that keeps top-selling momentum and impact before the sale, after the sale—continuously. The result: a profit payoff through repeat business, new business . . . more customer satisfaction.

Getting your feed into the laying house is a golden opportunity to really convince your new customers of money-making advantages in your program . . . to build "swear-by-your-feed" customers who tell others about the good results.

Hess & Clark's FPI program—launched a year ago—does just that. As a part of your overall promotion, FPI helps you sell new customers and convince them they made the right choice. Its continuous selling makes reorders the order of business. FPI helps you do this with a . . .

Full Performance Index for egg producers. FPI is a feeding-management plan designed to help poultrymen make more money. It sets profitable, practical full performance goals for laying flocks: 250 eggs per bird; 4.5 lbs. feed per dozen eggs; 90% Grade A eggs; and 90% laying house livability. Then FPI gives the formula for meeting these goals—good birds, good feed, good management PLUS the . . .

Full Potential Ingredient—nf-180. Added to your feeds, nf-180 frees layers from *constant disease drag*—the subclinical infections present in almost every flock which often rob feeds of egg-producing power. With nf-180 in the feed, poultrymen almost always see an improvement in flock performance . . . usually a *substantial* improvement. Many feed men confidently use nf-180-medicated feeds to demonstrate their feed superiority in split flock tests.

Turn the page for more facts about FPI . . . the *Feed Promotion Idea* that helps you turn prospects into customers . . . that helps you keep your present customers 100% sold.

how FPI sells and resells your layer feeds

Good feed performance depends on *far more* than just good feed. It depends on good birds; good housing and equipment; conscientious management and sanitation. If a customer skimps on any of these factors, his profits will suffer. And quite likely, he'll blame your feed.

The Full Performance Index program is your answer to this problem. It's a management guide that emphasizes the importance of *all* factors of egg production . . . and it points out that, even with all these factors in balance, birds still may fall short of full performance goals.

Why they fall short is a result of *constant disease drag*—subclinical infection. FPI's answer is nf-180 — the *Full Potential Ingredient* that clears up these low-level diseases, enables layers to utilize the full egg producing power formulated into your feed. nf-180 makes a real "see-it-with-your-own-eyes" improvement in feed performance, even in the best-managed flocks . . . and gives your salesman the most powerful selling story of the year.

Your servicemen, incidentally, will like the FPI-nf-180 program, too. They'll have far fewer calls for stress-and-disease-caused troubles . . . happier customers to call on when making routine checks.

FPI, then, gives your customers goals to shoot for. It gives them a management guide. And it gives *you* a *Full Potential Ingredient* for your feeds that helps you help your customers meet these goals. FPI is a sound program that convinces practically every user he has made the right feed choice. In fact, a recent survey of farmers who tried nf-180 showed that 88.2% were well satisfied with the results . . . a remarkably high percentage of user satisfaction.

The man in the picture—feed dealer George C. Black of Summerville, Ga.—is one of many feed men who sell new customers by suggesting they put test flocks on nf-180-medicated feed.

"I had this real good prospect with several thousand layers," Black relates. "I had been trying to get his business for a long time, but he kept telling me he was satisfied with his present feed. Finally I talked him into putting one 1300-bird house on one of my nf-180 feeds. He had another house of 1300 on his regular feed that we used as a control. When the birds peaked, our feed with nf-180 produced 100 more eggs a day than his regular feed. Now we feed all his birds. nf-180 helped us get this new customer."

"nf-180 keeps down a host of stresses and diseases," says 23,000-bird-owner Reginald Barton, Fayetteville, N.C. "I've used nf-180 for 2½ to 3 years and haven't had any disease problems. nf-180 keeps hens on feed . . . keeps them in production. I don't want to be without nf-180 in my feed."

"Extra livability decided me in favor of the nf-180 low-level program," says Donald Pardum, who raises 15,000 layers in North Highlands, Calif. "nf-180 also gives dependable production and overall good results. It keeps your birds from going into a costly slump. nf-180 pays for itself."

this nf-180-FPI program helps build solid layer feed customers like these . . . customers who stay sold on your brand of feed

"We ran a test between a feed containing nf-180 and my regular ration," says C. C. "Buddy" Hardy, who feeds 120,000 birds near League City, Texas. "The houses on nf-180 did so much better that we put our whole place on the nf-180 feed. Since then, production has been higher and steadier than ever before."

"We've had such good luck with nf-180 that I wouldn't be without it," says 4,000-bird-owner Kurt Kolberg, Galien, Michigan, who recently averaged 284 eggs per bird in a 1,237-pullet house. "Our local papers reported that as an example of what can be done," he says. "I give nf-180 much of the credit."

RESULTS! That's what sells layer feed. That's what makes nf-180—the Full Potential Ingredient—the most effective salesman you have

To convince yourself of the value of nf-180 in your feed, talk to poultrymen who use it. You'll find that most egg producers are far *more* than satisfied with nf-180. They are downright *enthusiastic*. The reason is that they have never seen anything make such an improvement in flock performance.

nf-180 is a completely different kind of drug—not a sulfa, not an antibiotic, not an arsenical. It is a man-made chemical . . . safe, nontoxic, with no harmful side-effects.

Unlike antibiotics, which simply hold germs in check, nf-180 actually *kills* germs. As a result, resistant germ varieties have little chance to develop.

In addition, nf-180 has a "broad bacterial spectrum." It attacks an extremely wide range of diseases . . . *prevents and controls more poultry diseases, in fact, than any other drug.* This is why a continuous low-level of nf-180 in your feed (25 grams furazolidone per ton of total ration) so effectively protects against stress effects and frees birds from constant disease drag.

This wide-range effectiveness also makes nf-180, at higher levels, invaluable in treating disease and getting slump-ridden flocks back to full production. We call this trouble-shooting use of nf-180 a "Two-week Tune-up." It's the ideal way to demonstrate to prospective customers the performance-boosting benefits of your nf-180-FPI feeds.

the first step: get your feed on the farm! the FPI program helps you do it with this . . . .

powerful dealer

here's a line-up of persuasive selling tools that enable dealers to tie-in solidly with national and regional FPI advertising (see back page). This FPI selling support has been remarkably successful in getting customers to try nf-180-medicated feeds. nf-180, in quality layer feeds, takes over from there.

most effective feed-selling tool ever for feed dealers!

This full-color, informative sound-slide film —"The Margin of Difference"—is an ideal way to tell the complete *Full Performance Index* story to your layer feed customers and prospects. Emphasizes the importance of setting egg production goals and keeping accurate daily records. Shows need for good birds, good feed, good housing and equipment, good management. Explains just what *constant disease drag* is . . . and how it often holds layers below their full bred-in, fed-in potential. Shows how your FPI laying feeds containing nf-180 can eliminate this problem. Gives case histories of men who have used nf-180 protective feeding for full layer performance. "The Margin of Difference" is approximately 12 minutes long. *It really sells!* It will help you hold the most "feed-sellin'" farmer meetings ever.

informative hand-out pieces, mailer, help sell FPI feeds

FPI "figure-it-out-yourself" folder is ideal for showing poultrymen how constant *disease drag* reduces profits. Eight-page FPI booklet and new "Make More Money" folder tell customers the complete FPI story . . . explain how your nf-180-FPI feeds boost layer income. And new FPI mailer that folds out to egg record chart will be saved and used for months.

useful management-helps for customers and prospects

This *Flock Performance Inventory* chart is the most complete, most useful egg record chart available to poultrymen. Makes it easy to check production, feed consumption, mortality and Grade A eggs against FPI goals. Pocket-sized Profit-Pointer dial shows nf-180 protection and treatment levels for specific diseases . . . explains all nf-180 feeding programs.

selling support

Colorful FPI display materials attract attention, identify your store as the place to buy nf-180-FPI layer feeds. *King-sized posters*—one featuring nf-180 low-level feeds and one featuring nf-180 "Two-week Tune-up" booster feeds—spotlight the benefits of your nf-180 rations. The *nf-180 Service Center* . . . a really unique and attention-getting counter-piece . . . is a center-of-interest in any feed store. Contains "take-home" information about FPI laying feeds and other nf-180 feed uses. Built-in Profit Pointer dial shows nf-180 level for protection and treatment of specific diseases. Your Hess and Clark salesman is the man to see for all FPI selling-aids.

a recent farm magazine survey of over 1,100 feed dealers gives solid proof that the FPI program really fires the interest of egg producers. The results show . . .

55.7% of feed dealers surveyed report direct inquiries from FPI magazine advertising . . . 60.5% increased sales of nf-180 feeds

In every part of the country—in every state—feed dealers report new customers and higher feed sales as a direct result of FPI advertising.

Radio listeners coast-to-coast are sold to the tune of the familiar, foot-tapping nf-180 jingle. Readers of leading farm and poultry magazines can hardly pick up an issue without seeing nf-180-FPI ads . . . ads that sell in a believable, effective way—by reporting tape-recorded interviews with nf-180 users.

Hess & Clark makes ads informative and factual to tell readers the full story, to *presell* them, to bring *real prospects* to the dealer's store—not just curiosity-seekers.

One man we interviewed said he *looks* for nf-180 interview ads every month. Another reported, "The ad gave me confidence the product would do what you said it would. Next time I bought feed, I thought, 'I'm going to see if nf-180 really does work.' It did, too."

The "sell-more-feed" results of nf-180-FPI advertising are demonstrated in the chart at right. It's a report on a mail survey of over 1,100 feed dealers in 11 states. The results are typical of what has been happening in most *every* state.

55.7% of all dealers answering reported direct inquiries from nf-180-FPI ads. Of the dealers reporting the actual *number* of inquiries, 23.9% said they received from 11 to 50 inquiries. The overall average was 8.9 inquiries per dealer. That's a lot of inquiries . . . a lot of prospects for future sales.

an example of nf-180-FPI selling effectiveness—a farm magazine survey of feed dealers in 11 states

	Have any farm people mentioned seeing these nf-180-FPI advertisements?		Have your sales of feeds containing nf-180 increased this year?		Have you developed any prospects for future layer feed sales?		Have you had any nf-180-FPI materials on display in your store?	
	YES	NO	YES	NO	YES	NO	YES	NO
Iowa	61.8%	38.2%	66.3%	23.6%	52.8%	12.4%	91.0%	9.0%
Illinois Indiana	57.0%	40.0%	63.0%	25.0%	58.0%	12.0%	90.0%	9.0%
Minnesota North Dakota South Dakota	59.4%	37.6%	64.3%	18.8%	51.5%	20.8%	80.2%	19.8%
Wisconsin	37.8%	58.9%	40.0%	42.2%	35.6%	22.2%	78.9%	18.9%
Missouri	66.7%	33.3%	70.7%	19.5%	74.4%	7.7%	88.1%	11.9%
Nebraska	56.7%	43.3%	63.4%	23.3%	60.0%	23.3%	60.0%	20.0%
Ohio	55.5%	44.5%	72.8%	18.4%	58.2%	17.3%	79.5%	20.5%
Kansas	45.5%	54.5%	50.0%	25.0%	40.0%	15.0%	78.3%	21.7%

Where percentages do not total 100%, some dealers did not know or didn't answer.

REMEMBER: 88.2% of farmers surveyed are pleased with nf-180 results—a good indication that your customers, too, will like nf-180. Your Hess & Clark salesman will be stopping with the full FPI story soon. In the meantime—if you missed this 14-page insert in an earlier Feedstuffs—write us for a copy. It reports how extension poultrymen, breeders and farm paper editors feel about the FPI management program . . . and contains case-histories of feed men and poultrymen who use it. Tells how Hess & Clark will help you get started with FPI.

HESS & CLARK
Ashland, Ohio
Division of Richardson-Merrell Inc.

Litho in U.S.A.

officials urge that companies give this serious consideration.

In employing code numbers, there has been a tendency in some instances to place them so as to appear as a part of the brand name. There would seem to be no objection to this but since this is strictly a code number, it probably would be preferable to print it in one corner of the tag, completely separate from all other representations. If this is not done, there is always a question as to whether it is or is not a part of the brand name.

Generally speaking, it appears that control officials look upon the brand name as one thing and a code number as another. Certainly these two items should not be so placed on a tag as to be confusing.

SIDE BAR LABELING—Another aspect of this is side bar labeling. This has been attempted to give a quick reference to those handling the feed.

Side bar labeling is satisfactory if what appears in the side bar agrees with what appears on other parts of the label. Some companies try to shorten the designation on the side bar so that it is difficult if not impossible to know which is the name of the feed, the side bar or information appearing elsewhere on the label. Since they do not agree, then what is the feed in such cases?

Also, side bar labeling takes up valuable space on an otherwise crowded tag. Perhaps there is a better use for this space.

RECOMMENDATION—Out of all this it would seem that labeling can be greatly simplified if a standard label is used, similar to the label with which we are all familiar. Such a format will be found in the annual publication of the Association of American Feed Control Officials.

If further identification is necessary for quick recognition, then a four digit number printed at the top of the label would answer the purpose. This would eliminate such "frills" as either side bar labeling or overprinting.

Equipment Installation

NEW YORK—To meet the steadily increasing demand for the pasted valve multiwall bag, St. Regis Paper Co. has installed in its Kansas City bag plant the latest model B-8700 Burroughs bottomer, which it is said, can make a wider range of pasted bag sizes and types than is possible with any other single piece of bag manufacturing equipment.

The machine will increase the plant's production capacity of regular pasted and stepped-end bags and will speed service to producers of agriculture, food, chemical and rock products in the mid-America region served by the plant. Pasted open mouth baler bags can also be manufactured on the wide-range equipment.

Arkansas Feed Group To Meet Sept. 21-23

FAYETTEVILLE, ARK. — The Arkansas Feed Manufacturers Assn. will hold its annual meeting here Sept. 21-23.

J. W. Cobb, secretary, said the meeting will be held at the Mountain Inn. More information may be obtained by writing Mr. Cobb at P.O. Box 391, North Little Rock, Ark.

FEED STORE REOPENS

ROGUE RIVER, ORE.—Reopening of the Rogue River Feed & Farm Supply Store under the management of Harry R. Neal, has been announced by John Leyen, administrator of the estate of John and LaDene Chiamulera. Mr. Neal states that policies of the late owners will be followed to give the community the best in service and supplies.

An Alert, Healthy Dog . . . A RYDE-Fed Dog

Ryde's *FLAKED* DOG FOOD

America's Only Flaked Dog Food

"The EATIN'EST dog food ever."

Ryde's is so well balanced nutritionally, your customers will notice the difference in their dogs' health and vigor after feeding Ryde's for just two weeks! TRY THIS PROVEN PROFIT-MAKER. You can count on Ryde's to sell and continue to sell and to show a steady profit.

In 5, 25 & 50-lb. Bags For Customer Convenience

Ryde's Flaked Dog Food is sold exclusively to the Feed Trade and Pet Shops

RYDE & CO. 3939 So. Union Ave., Chicago 9, Ill.

"I'd Like to Buy a Wenger, But I Can't Afford It."

How many times have you heard this statement, or even said it yourself? The fact is—it couldn't be more wrong! Because, in every piece of Wenger equipment, prices start at the lowest figure at which dependable quality can be sold. And, as someone expressed it so aptly years ago, if you have to watch your expenses you can't afford to buy cheap equipment.

We agree that you can buy cheaper goods. But it is our experience that satisfaction is more than proportionately reduced as the cost goes down. This is especially true in feed milling machinery, where quality and service are essential factors.

A mixer, a liquids application system, a bulk unloader, or a complete pelleting and cooling system by Wenger will still be in profitable production years from now. Because when you purchase equipment from Wenger you are purchasing proven equipment, engineered and backed by the firm which has developed more new and important equipment than has any other supplier to the industry.

This, then is why we say, "You CAN afford a Wenger," the very best value your milling dollar can buy. We invite you to get in touch with Wenger today.

Wenger Mixer Mfg.

Sabetha, Kansas AVenue 4-2133

. . . milling pacesetters through imagineering . . .

New! Combination Reel and Paddle Design Batch Mixer

New! Model B Multi-Duty Pellet Mill

Horizontal Pellet Cooler

ACCEPTANCE is building our business...

have you tried today's Peterson Male?

Peterson MALE

PETERSON breeding farm

DECATUR, ARKANSAS

WORTH LOOKING INTO

NEW PRODUCTS • NEW SERVICE • NEW LITERATURE

DESCRIPTIONS OF NEW AND IMPROVED PRODUCTS AND SERVICES PROVIDED BY MANUFACTURERS AND SUPPLIERS ARE PRESENTED IN BRIEF FORM. FOR ADDITIONAL INFORMATION, PLEASE USE THE ACCOMPANYING COUPON.

No. 7560—Steam Boiler

A three-year guarantee against so-called "thermal shock" is being offered by the Boiler Engineering & Supply Co., Inc., on its line of Continental automatic packaged boilers for commercial and industrial applications. "Thermal shock" is said to be the cause for many boiler failures, and the boiler owners are offered protection against loss from structural failures usually attributed to flow rate or temperature differences of feed water.

The company's line of boilers includes models designed to operate at pressures from 15 to 250 p.s.i. and in terms of horsepower, they range from 15 to 700 h.p. For complete information, check No. 7560 on the coupon and mail.

No. 7565—Vitamin Blocks With Increased Vitamin A

Western Condensing Co., division of Foremost Dairies, has stepped up the vitamin A content to include 15,000 U.S.P. units per pound in both the 50-lb. block and 10-lb. "Handi Pak" in its Peebles' Red Whey-Vitamin blocks.

Peebles' Red Whey-Vitamin blocks are recommended by the company for free choice feeding immediately prior to and following known stress conditions such as vaccination, medication, weather extremes and environmental change to keep birds on feed and facilitate digestion of the regular ration.

Officials say that the vitamin blocks should be fed along with the prescribed treatment when disease strikes. They report that recent tests have shown the vitamin blocks to be especially effective as a control against C.R.D. in combination with good management practices.

For additional information, check No. 7565 on the coupon and mail.

No. 7563—Proportioning Liquid to Solid Ingredients

B-I-F Industries has issued "It's a Fact" data on the problem of proportioning liquid to solid ingredients, such as fat to pellets in the feed industry.

This new data, accompanied by bulletins, explains proportioning by combining units from B-I-F's complete line of equipment for dry and liquid feeding, continuous weighing and flow metering.

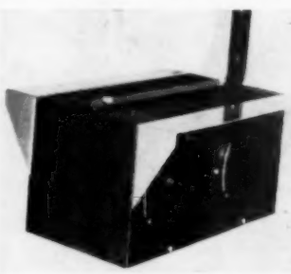
The two-page data sheet and accompanying bulletins featuring the Model 36-02 Belt Weigher and Model EDB Blender contain illustrations, schematic diagrams of a typical installation, dimensions and a description of the operations, uses and advantages of B-I-F equipment for proportioning applications.

For a copy of the "Facts" on proportioning liquids to solids, check No. 7563 on the coupon and mail.

No. 7567—Grain Truck Traffic Control Signal

A new grain truck traffic control signal light, designed for orderly control of traffic during the grain receiving season, has been developed by Hot Spot Detector, Inc.

The signal, two sets of green and red "stop-and-go" lights, is operated by the elevator scaleman to direct incoming and outgoing traffic on and off the scale.



For additional information, check No. 7567 on the coupon and mail.

No. 7559—Pellet Mill

An improved version of the Oliver Pellet Mill is announced by the KGC Corp., the manufacturer. The mill is described as being a compact unit with few moving parts and operates with minimum vibration.

Five models are available. Production of 2 to 10 tons per hour (depending on the commodity) is standard and the unit pellets from ⅛ to 1 in. diameter. Pellet length is variable from ¼ to 1½ in. and is adjustable while the mill is in operation.

All Oliver Pellet Mills are equipped with stationary horizontal dies with feed entering from above and distributed evenly by means of a rotating cone around the entire circumference of the die. This is said to assure "maximum use of the entire die surface and lessen the possibility for wear and resultant loss of efficiency in certain portions of the die."

The vertical feed system and the stationary horizontal die make possible a conditioning time of 3¾ seconds, according to company officials. The short mash-to-pellet period "prevents over-cooking and possible loss of nutritional benefits." Dies can be changed without the need of special tools in approximately one-half hour.

For additional information, check No. 7559 on the coupon and mail.

No. 7561—Molasses System for Mobile Mills

An electrically-controlled system for accurately metering molasses being blended into feed rations through Daffin Feedmobiles has been announced by Daffin Manufacturing, division of Daffin Corp.

Called the Daffin Molass-O-Meter-

Send me information on the items marked:

- ☐ No. 7557—Isolation Systems
- ☐ No. 7558—Exhaust Fan
- ☐ No. 7559—Pellet Mill
- ☐ No. 7560—Steam Boiler
- ☐ No. 7561—Molasses System
- ☐ No. 7562—Truck Unloader
- ☐ No. 7563—Proportioning Liquid
- ☐ No. 7564—Newcastle Vaccine
- ☐ No. 7565—Vitamin Blocks
- ☐ No. 7566—Moisture Tester
- ☐ No. 7567—Traffic Control Signal

COUPON NOT VALID AFTER 60 DAYS

Others (list numbers) .....

NAME .....

COMPANY .....

ADDRESS .....

CLIP OUT—FOLD OVER ON THIS LINE—FASTEN (STAPLE, TAPE, GLUE)—MAIL

FIRST CLASS PERMIT No. 2
(Sec. 34.9, P. L. & R.)
MINNEAPOLIS, MINN.

BUSINESS REPLY ENVELOPE
No postage stamp necessary if mailed in the United States

POSTAGE WILL BE PAID BY—

Feedstuffs

P. O. Box 67

Reader Service Dept. Minneapolis 40, Minn.

MACHINE OF THE MONTH

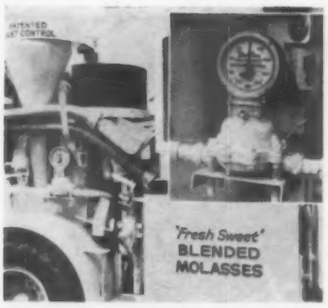
AMERICAN MADE...YOUR BEST BUY

EUREKA DUPLEX AGITATOR-MIXER

THE BIG DIFFERENCE is in the paddles...patented, adjustable loop-type paddles especially designed for blending liquids with dry ingredients. Mixing action is gentle but thorough, for perfect results. Duplex saves on space and power consumption, too. Choice of six models with capacities to 25 tons per hour.

S. HOWES CO., INC. • SILVER CREEK, N. Y.

OTHER FEATURES include silent drive, drop-bottom clean-out doors. Write for BULLETIN 650 giving full details and specifications.



ing System, the automatic control incorporates a pre-set metering device operated by a solenoid, that is said to assure accurate delivery of the volume of molasses selected by the operator.

The metered flow of molasses is automatically shut off when the pre-set needle on the meter dial returns to "zero," preventing both a deficiency or an excess volume of warmed liquid molasses being blended into the mixer-batch of finished feed.

Standard on all new factory-delivered Daffin Feedmobiles, the Molass-O-Metering System is also available in kit form for field installations.

For additional information, check No. 7561 on the coupon and mail.

No. 7557—'Pigloo' Isolation System for Hogs

An improved version of "Pigloos," isolation systems for raising hogs, has been announced by a new company, Impro, Inc. The firm will distribute Pigloos along with other products of Pigloos, Inc., and Collins Products, Inc.

The announcement said that a former contract granted exclusive distribution of Pigloos to Nutrena Mills; Pigloos will now be available through Impro, Inc., and its distributors and dealers.

"Pigloos are based on the principle of isolation," the announcement said. "Mammals build antibodies which are secreted in their milk to protect the young. By isolating each sow and litter, we reduce the danger of infection from other animals by microorganisms against which the sow's antibody protection is not prepared. . . .

"The isolation shown effective with the sow and litter can also be used all the way to market. We are now able to provide Pigloo systems to fit into a wide variety of hog operations. It is now possible to produce 2,000 hogs a year in some systems with about the same total investment previously required for a 1,000-hog-a-year operation."

The firm said that a change in size and shape of feeding floors in the confinement system has made possible greater capacity. Changes in physical construction of Pigloos also were noted.

For additional information, check No. 7557 on the coupon and mail.

No. 7558—Poultry Building Exhaust Fan

A new exhaust fan that will remove 5,000 cu. ft. of air per minute at ⅛ in. static pressure from a poultry building has been introduced by the Big Dutchman Automatic Poultry Feeder Co.

The new fan, called the Vent-Matic-50, mounts in the sidewall of the building, and can be controlled by

both a timer and a thermostat. A 24 in. all-aluminum fan delivers the 5,000 cu. ft. per minute from a ½ h.p. thermally protected, dust-proof motor.

All brass shutters prevent back drafts, and an all-steel hood protects the fan from the elements. The hood is all blue Hammerloid enameled and will not rust or corrode. For additional information, check No. 7558 on the coupon and mail.

No. 7564—Vaccine for Newcastle Disease

The Ray Ewing Co. announces that TCND, a new vaccine to control Newcastle disease, is now being produced in sufficient quantity to be available throughout the U.S. The Ewing firm is exclusive national distributor.

The tissue culture vaccine was conceived by Dr. R. A. Bankowski of the University of California. It is said to have been "thoroughly field tested" and to have been "proved successful by over 7 million doses in commercial use."

Through intramuscular vaccination, it provides dependable and long-last-

(Turn to page 56)

IN THE CRUCIAL 60's

A WHOLE STAFF of top-notch engineers is working for you... but they're on our payroll. Some are specialists in custom-equipment design... others in feed mill planning and layout. Still others concentrate on production engineering, equipment installation, service and maintenance techniques, new product development.

Individually and collectively, the wealth of experience and talent offered by these S. Howes engineers is at your service, wherever your mill is located. They know their business... and they know your business. The combination is hard to beat.

S. HOWES COMPANY, INC. • SILVER CREEK, NEW YORK

AMERICAN MADE... YOUR BEST BUY

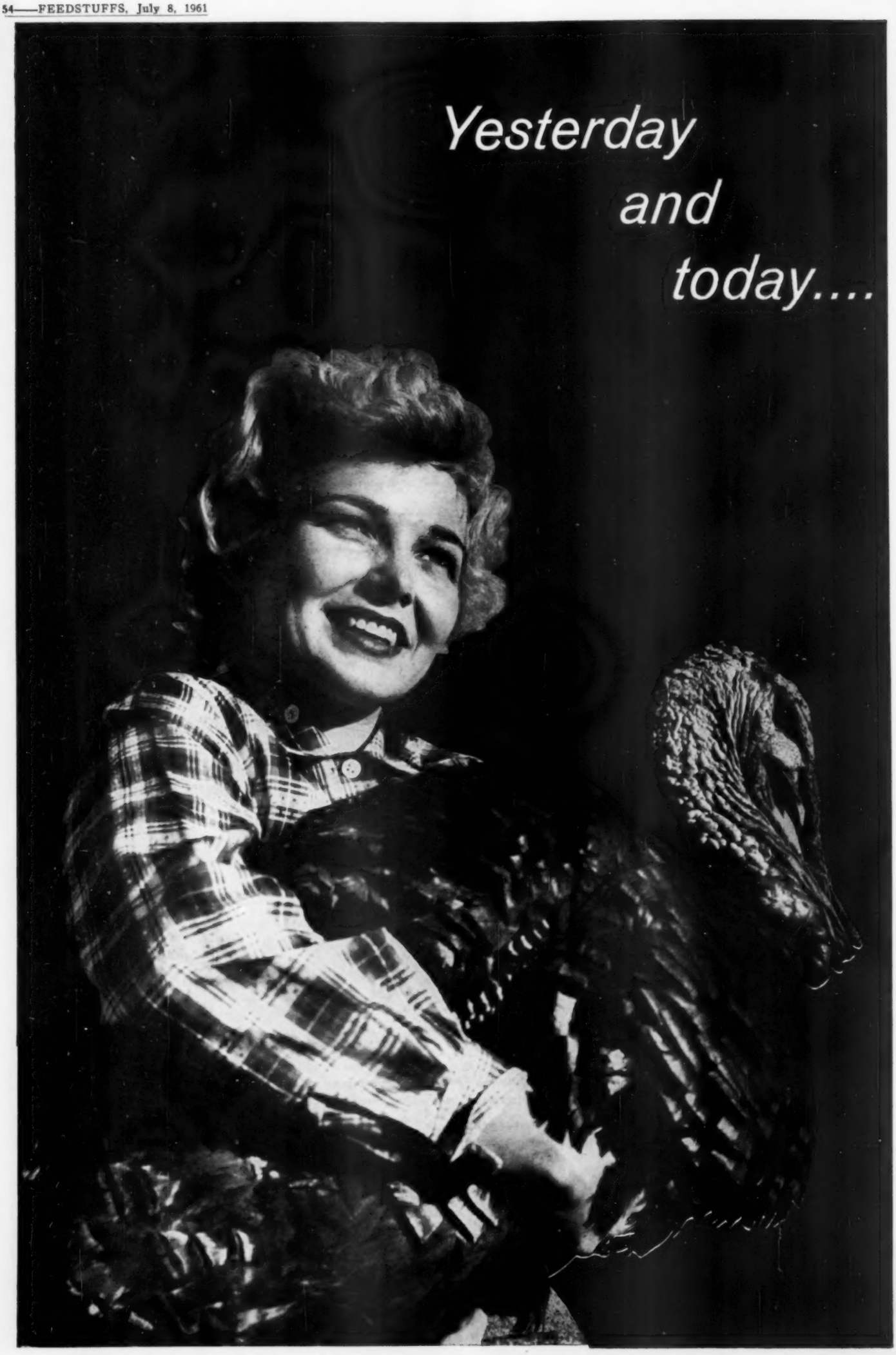
GET FAST ACTION

CALL GEORGE WILLIS: Silver Creek, YELLOWSTONE 4-2611, collect. He'll arrange for a complete HOWES-SURVEY of your mill by the nearest Howes field engineer. No obligation.

Quality-Minded PROCESSORS prefer PILCH

Pilch's POULTRY BREEDING FARMS, INC.
General Offices and Research
HAZARDVILLE, CONNECTICUT
Distribution Centers
Smithfield, N. C. • Talladega, Ala.
Calistoga, Calif.

Use Feedstuffs WANT ADS for RESULTS


Yesterday
and
today....

Histostat®-50 still prevents blackhead best

...and this year, many more millions of turkeys will be protected with this No. 1 blackhead preventive

Every year, for ten years now, more and more turkeys have been raised on feed containing Dr. Salsbury's Histostat-50. Why? Because growers have found that Histostat-50 consistently protects their flocks against mortality and weight loss from blackhead. That's reason enough, because this kind of disease prevention is their best assurance of strong, healthy birds, the kind that are necessary to profit. In addition, test after test at experiment stations have given similar results: *Histostat-50 prevents blackhead best*. So encourage growers not to take chances with turkey profits. Mix Histostat-50 in all rations for turkeys on range and advise that it be fed continuously. Growers may need to feed Histostat-50 earlier, if they've had trouble with blackhead in the brooder house. Remember—growers can't make money on dead birds.

Histostat-50 is widely advertised

Because of sustained advertising and promotion, your customers know of Histostat-50's superior blackhead protection. That's why it is steadily growing in popularity. Make sure your turkey feeds can measure up—mix Histostat-50 in rations for range birds. Write, wire, or phone for Feed Manufacturers Guide. Or, ask for a Dr. Salsbury's representative to call personally and talk with you about Histostat-50, the feed additive that is the nation's No. 1 blackhead preventive!

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Charles City, Iowa, U.S.A.

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ing immunity — one dose protects broilers up to market time, two doses protect layers up to 101 weeks of age, company officials report.

TCND can be administered safely with no adverse reaction following injection. It does not induce stress, throw layers off production, cause respiratory symptoms, eggborne contamination, or spread to non-vaccinated birds, officials stated.

The tissue culture attenuated live virus vaccine is grown in cultures of pig kidney cells. Because it is a tissue culture of animal instead of avian origin (egg embryo), the company says that there is no transference of other avian diseases.

TCND is manufactured by Poultry Health Laboratories, Davis, Cal., from patents held by the University of California.

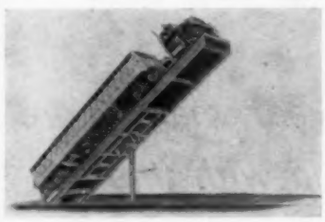
For additional information, check No. 7564 on the coupon and mail.

No. 7562—Hydraulic Truck Unloader

A new truck unloader that incorporates use of a single fixed hydraulic cylinder has been developed and marketed by Straight Engineering Co.

Designed specifically to accommodate the large "semi," this new truck unloader is said to be built to handle the heaviest loads.

Advantages of the fixed hydraulic



cylinder are its up and down straight movement, which eliminates lateral platform sway; elimination of all flexible hose connections in the hydraulic line to the cylinder, and the need for only one set of "V" packing, according to company officials.

The unloader is also said to be ideal for platform scale installations. For additional information, check No. 7562 on the coupon and mail.

No. 7566—Commodity Moisture Tester

Information is now available from the United States Testing Co.'s instrument and apparatus division on a newly developed commodity moisture tester that is designed for use in measuring the moisture in grains and other granular materials.

The tester is said to have broad use in both production and laboratory applications. It performs a complete determination in less than 30 seconds. A large sample chamber reduces the number of tests required to get representative moisture values. This chamber is removable and serves as a scoop when used with grains, powders and other loose materials.

Applications of the Commodity Moisture Tester include monitoring production processes to prevent overdrying, checking commodities bought on a weight basis at the point of purchase and checking moisture of commodities and materials in storage.

In operation, a sample is placed in the test chamber and the top plunger released. Pressure is applied by the operator with three or four quick manipulations of the hydraulic pump. The dial reading is converted to percent moisture with a chart provided with the instrument. Samples to be tested need not be weighed. The tester is battery operated.

For literature describing the Commodity Moisture Tester, check No. 7566 on the coupon and mail.

Also Available

The following new products have been described in previous issues of Feedstuffs and information about them may still be obtained by jotting the appropriate number of the coupon and forwarding it to Feedstuffs.

No. 7473—Arsanilic acid booklets, Abbott Laboratories.
No. 7474—Bulk delivery truck, Pamco, Inc.
No. 7475—Cable socket for grain shovels, Brooks Machine & Mfg. Co.
No. 7476—Conveyor belting, Corns Conveyor Belt Co.
No. 7477—Moisture recorder leasing, Burrows Equipment Co.
No. 7478—Portable air filters, Fuller Co.
No. 7479—Hog health product, Dr. Salsbury's Laboratories.
No. 7480—Continuous weighing scale, B-I-F Industries.
No. 7481—Trucklift safety device, J. B. Ehrsam & Sons Mfg. Co.
No. 7482—Supplement for specialty feeds, Borden Special Products Co.
No. 7483—Conveyor literature, Finco, Inc.
No. 7484—Santoquin feeder for dehy, Wenger Mixer Manufacturing.
No. 7485—Vertical feed mixer, Shop Engineering Co.
No. 7486—On-farm feed depot, Leach Mfg. Co.
No. 7487—Boxcar unloading unit, Andrews Machine Co.
No. 7488—Pellet mill die, Sprout, Waldron & Co., Inc.
No. 7489—Swine feed additive, Hess & Clark.
No. 7490—Broiler male, Barker & McMillan Hatchery, Inc.
No. 7491—Automatic batching and mixing, Wisconsin Electrical Mfg. Co., Inc.
No. 7492—Farm mill using concentrates, The General Supply & Equipment Co.
No. 7493—Self-cleaning conveyor, Duplex Mill and Manufacturing Co.
No. 7494—Corn sheller for mobile mill, The Iowa Portable Mill Co.
No. 7495—Truck blower unit, Ripco, Inc.
No. 7496—New automatic bagging scale, Richardson Scale Co.
No. 7497—Equipment purchasing guide, The Grain Processing Machinery Mfrs. Assn.
No. 7498—Feed bag coding, Pitney-Bowes, Inc.
No. 7499—Automatic egg gatherer, Big Dutchman Automatic Poultry Feeder Co.
No. 7500—Grinding and mixing unit, Tusco Sales.
No. 7501—Conveyor model bag closure, Minneapolis Sewing Machine Co.
No. 7502—Equipment literature, Seco, Inc.
No. 7503—Basket extractor, V. C. Anderson Co.
No. 7504—Portable pneumatic unloader, Sprout, Waldron & Co., Inc.
No. 7505—Portable transfer unit, Fuller Co.
No. 7506—Automatic bulk handling equipment, The Henderson Manufacturing Co.
No. 7507—External fat application system, Wenger Mixer Manufacturing.
No. 7508—Belt-propelled tripper, Finco, Inc.
No. 7509—Ventilating fan recorders, Service Recorder Co.
No. 7510—Grain soaker-feeder, Baughman Manufacturing Co.
No. 7511—Vibration inducers, The Martin Engineering Co.
No. 7512—Broiler feed additive, Hess & Clark.
No. 7513—Air inlet for poultry houses, The Big Dutchman Automatic Poultry Feeder Co.
No. 7514—Mixing equipment, Superweld Corp.
No. 7515—Bulk feed body, Baughman Manufacturing Co.
No. 7516—Vitamin A and D products, Hoffmann-LaRoche, Inc.
No. 7517—Poultry house ventilation, Big Dutchman Automatic Poultry Feeder Co.
No. 7518—Self-powered grain spreader, General Equipment Co.

SELLIN' SAM — **By Jim Zilverberg**

"Instead of his briefcase, he brought his wife's diaper bag by mistake!"

No. 7519—Dog food fortifier, Borden Special Products Co.

No. 7520—Feed service merchandising program, William Davies Co., Inc.

No. 7521—Centrifugal dust separator, Day Co.

No. 7522—Bulk weighing brochure, Toledo Scale Corp.

No. 7523—Steam boilers, Sellers Engineering Co.

No. 7524—Conveying and rotary valves, Systems Engineering & Manufacturing Co., Inc.

No. 7525 — Bulk feed unit, FMC Bulk Transport Systems.

No. 7526—Batch process controller, Control Equipment Corp.

No. 7527—Air unloading for mobile units, Ripco, Inc.

No. 7528—Gyro-cooler data sheet, Young Machinery Co., Inc.

No. 7529 — Pneumatic unloading systems, Sprout, Waldron & Co., Inc.

No. 7530—Conveyor literature, Screw Conveyor Corp.

No. 7531 — Turkey house automation, Big Dutchman Automatic Poultry Feeder Co.

No. 7532 — Windowless poultry houses, Masonite Corp.

No. 7533—Portable feed manufacturing unit, Dodgen Industries.

No. 7534—Automatic checkweighers, Toledo Scale, Div. of Toledo Scale Corp.

No. 7535—Automatic sampling device, Gustafson Manufacturing Co.

No. 7536 — Package mill, Myers-Sherman Co.

No. 7537—Bucket elevator, Pioneer Belting & Conveyor Equipment Corp.

No. 7538 — All-purpose feed base, Fruen Milling Co.

No. 7539—Sanitation product, Organic Soil Builders, Inc.

No. 7540—Newcastle disease vaccine, Delaware Poultry Laboratories.

No. 7541—Poultry and egg pigmenting agent, Grain Processing Corp.

No. 7542 — Feeder unit, Sterwin Chemicals, Inc.

No. 7543 — Fiberglas fume hood, Laboratory Construction Co.

No. 7544 — High-speed railroad scales, Fairbanks, Morse & Co.

No. 7545 — Proceedings of nitrofuran symposium, Hess & Clark.

No. 7546—Pressure pneumatic systems, Sprout, Waldron & Co., Inc.

No. 7547 — Disease, dosage chart, Merck Chemical division, Merck & Co., Inc.

No. 7548 — Portable air vibrator, The Cleveland Vibrator Co.

No. 7549—Corn husker-sheller, Haban Manufacturing Co.

No. 7550 — Spinner gear cases, Highway Equipment Co.

No. 7551—Utility bucket elevator, Universal Hoist Co.

No. 7552 — Detachable container system, The Heil Co.

No. 7553—Metering pump, Madden Corp.

No. 7554—Flow metering units, Industrial Powertronix, Inc.

No. 7555—Heavy-duty vacuum car cleaner, Spencer Turbine Co.

No. 7556—Hog feed additive, Ultra-Life Laboratories.

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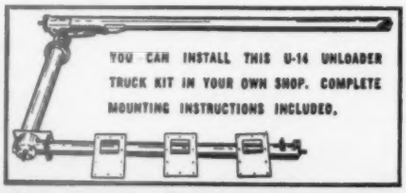

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'Dairymen Like Low-Protein Concentrates'

SAN LUIS OBISPO, CAL. — Low protein-high energy concentrates are "proving to be money savers for a group of California dairymen," according to John H. Evans, University of California extension farm advisor.

Mr. Evans, farm advisor for San Luis Obispo County, says that 15 dairymen are now using the less expensive low protein-high energy concentrates. And, he adds, their Dairy Herd Improvement Assn. records show that "the herds are producing every bit as well as when they were feeding more costly medium to high protein concentrates."

The trend began after a livestock nutrition school held here last winter, according to Mr. Evans. At that time, Robert D. Appleman, extension dairyman at the Davis campus of the University of California, discussed the value of the low protein-high energy concentrates.

Mr. Evans said that when dairymen feed their herds good quality alfalfa hay free choice, "it's the energy that's important in the concentrate, not the protein."

Sample Concentrate

The sample concentrate which one dairyman began feeding his herd of 50 Guernsey cows consisted of 800 lb. of barley, 800 lb. of milo, 260 lb. of beet pulp, 140 lb. of molasses and 1% each of salt and dicalcium phosphate.

This mixture contains 7% digestible protein and 77% total digestible nutrients, according to Mr. Evans.

The dairyman had been giving the herd free choice alfalfa hay and a high protein concentrate possessing 15 to 20% digestible protein and 70% or less total digestible nutrients, Mr. Evans commented.

The sample concentrate costs him about $54 a ton, approximately $16 a ton less than the high protein concentrate. This has enabled him to save $90 a month for the past half year, according to Mr. Evans.

Name Change Told

DES MOINES—The name of Interstate Bag Co. here has been changed to Great Plains Bag Co.

Making the announcement was Marvin Pomerantz, president of the firm. He said the name change came as a result of a re-search of registered names on file in the state of New York. He stated, "It was found that a subsidiary of the Albermarle Paper Co. has been and is now using the name Interstate Bag Co." Mr. Pomerantz said that the new name more accurately describes the marketing area of the new corporation.

The firm, which makes a complete line of multi-wall paper and textile bags and other packaging, has temporary offices in the Bankers Trust Building here. In late July the firm expects to move to new manufacturing and office facilities being erected at 2201 Bell Ave., Mr. Pomerantz commented.

WHAT'S IN IT FOR YOU

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20,000 International Units of vitamin E per pound. The only way you can be sure a feed has vitamin E is to add vitamin E. Substances that merely protect vitamin E are worthless if there's no vitamin there to protect. With *Myvamix*, you know the E is there. The cost is only a few dimes per ton of feed.

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FOR USE IN THE MANUFACTURE OF REGISTERED FEEDS

20,000 INTERNATIONAL UNITS OF VITAMIN E PER POUND

IN THE FORM OF DISTILLED CONCENTRATE OF D-ALPHA-TOCOPHERYL ACETATE ABSORBED ON SOY GRITS AS A CARRIER.

DPi

MADE IN ROCHESTER, N. Y., U. S. A., BY

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d- When nature makes vitamin E, she gives to each molecule a "right-handed" twist. A less effective form, known as "*dl*," consists of both "right-hand" and "left-hand" molecules in equal numbers. The vitamin E in *Myvamix*, like the vitamin E in nature, is all "right-handed"—all *d-*. It's 36% more potent than the man-made variety.

alpha- At least seven plant substances—tocopherols—have vitamin E activity. Far and away the most effective member of the tocopherol family, biologically speaking, is "alpha." To equate tocopherol with vitamin E is misleading. Corn, for example, is rich in tocopherol. But nearly 90% of its tocopherol is in non-"alpha" forms of weak vitamin E effect. "Alpha," the biologically effective tocopherol, is what you get in *Myvamix Vitamin E*.

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JOE BROOKS

BY AL P. NELSON

Changing Agriculture Idea

When Smiley Johnson, Joe's handy sign man and truck driver, came into Joe's office late that July day, he was not smiling. In fact, he had a sober look on his face.

"What's the matter, Smiley?" asked Joe. "Something wrong?"

Smiley looked a little alarmed. "Say, how can you tell? Does my expression give away what I'm thinking?"

Joe chuckled, leaned back and folded his hands behind his head. "Well, slightly. I know you pretty well, Smiley. You've worked here eight years. I ought to know something about your reactions."

Smiley chuckled. "Say, perhaps that's why I always lose my best girls. They can read my mind. I hope I'm not getting like Milt."

Both Joe and Smiley laughed heartily.

"Putting jokes aside, Joe, I really have something on my mind. And it concerns our business and our farmer friends."

"You have? Well, let's hear it," Joe invited.

Smiley took a chair. As Rusty Hagen, the bookkeeper, looked up questioningly, Smiley said, "No, you can stay, Rusty. It's nothing private."

"Okay," said the faithful bookkeeper, going back to work.

Smiley crossed one leg over the other. "Joe," he said, "I was reading a farm magazine during the lunch hour, and it started me thinking."

"Good," said Joe. "You can't keep up with what's happening in agriculture unless you keep in touch with the magazine articles."

Declining Farm Number

"I read," said Smiley, "that in 1950 this country had 5,380,000 farms. In 1960 there were 4 million farms. And predictions are that by 1965 there will be only 3 million farms."

"I've read figures like that, too," said Joe. "Farms are getting bigger and there are fewer small farms. That's why we are putting lots of sales effort on the big feeders."

Smiley nodded. "But, Joe, we don't want to forget the small farmer."

"No, we're not forgetting him. We are anxious to get his business, too, whatever it is. But we can't keep him in business if that is what you mean."

"I do mean something of the sort, Joe," Smiley said seriously. "Perhaps such a farmer can't earn all of his living on a farm. But he can continue to earn part of his living there. And a heck of a lot of them still want to continue to live on farms."

"If they can afford to financially," Joe put in.

"Sure. And we can help them."

Joe put his hands on his knees. "Well, Smiley, how do you propose to help the small farmer stay on the farm?"

The employee's face was serious. "Joe, we know that lots of farmers on small acreage have part time or full time jobs elsewhere. They do the farm work when they get home from their other jobs. Or the wife or children help with the farm work. Somehow, it gets done, the family stays on the farm and has some independence and income."

"Right. I think we'll always have some people like that. And we want their business. I've found that such customers pay their bills promptly as a rule, for they have cash income all the months of the year—those town jobs help out."

Small Farm Business

"Yes, just thinking about it, I know we have many such customers. We sell them feed for a few pigs, some chickens, or ducks. And they buy machinery such as garden tractors, lawn and garden tools, etc. Those items carry a good profit margin."

"But we can't do anything more for those customers, Smiley."

"Yes we can, Joe. We can make a survey of our territory and find out what the small farmers are doing for extra income besides working at town jobs."

Smiley paused to let his statement sink in. "There are some customers who set up trout farms and pheasant

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It will help you recognize Burlap's biggest advantage to *you*. You will realize that any customer is *better off with Burlap*... therefore, *you* are, too! For instance, Burlap bags will support a return-bag program. So even if other packaging materials are lower in *price*, Burlap is lower in *cost*. Look at Burlap from your *customer's* viewpoint.

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Dr. Salsbury's famous Wavac (drinking-water vaccine) is now packaged in a new ten-pack container that makes it easier to stock, handle, and sell. Note the new look . . . neat, compact appearance . . . ten bottles of Wavac nested in a glistening, frosty white carton made of expandable polystyrene.

Two kinds of Wavac to meet every flock need: Wavac in combined form to protect against Newcastle disease and infectious bronchitis; and Newcastle Wavac in single form. Wavac in the new Vac-Pak is being advertised to your customers. They're looking for the "new look" in vaccine packaging — Vac-Pak. So stock and sell Wavac in the new Vac-Pak carton.

Contact your Dr. Salsbury's representative or write direct.

- Convenient, easy to handle and store, highly resistant to impact damage.
- Vac-Pak is color-coded. Sealing tape identifies the contents, serial number, expiration date.
- Same high-quality Wavac so well known to poultrymen everywhere.
- Each bottle completely labeled—all directions on or inside fold-out label (see at right)

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Charles City Iowa, U.S.A.

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farms on their land, as sidelines. There's a trend now for some farmers to try to get city folks to spend vacations on a farm, at $65 to $80 per week per family. And some farmers could raise more fruits and produce to sell at their own produce stands on the roadside. With all the motor traffic we have today, these roadside stands would get more business for some farmers."

Joe nodded. "Yes, to a certain extent that's true. People like to buy those things fresh off the farm."

"And then there are some farmers with certain types of machinery that could do custom work for other farmers," Smiley suggested. "Joe, if we contacted our county agent, I'll bet he could get together a list of all the part time jobs farmers can get and what sidelines they can operate right on their farms for additional income."

Joe's eyes began to brighten. "And then what?"

"Well, we could list these jobs and

"What happened while I was out to lunch?"

sidelines in our monthly bulletin," Smiley went on. "We could name farmers in the county who have sidelines—if they'll let us do it—and all this information could help to put more hope into the hearts of many farmers with small acreage. It might be just the information they are looking for to keep them on the farm."

"Say, it might at that, Smiley," said Joe enthusiastically. "Now I am getting the full impact of your idea. This would be public service on our part. It would show the farmers that we are trying to help them, especially those with this problem. I'll work this up, contact the county agent and see what we can do. Thanks for a fine suggestion, Smiley. I won't forget you on pay day. Keep right on thinking of ideas which you believe we can use to keep our business operating at a profit. As owner, I can get only so many ideas. I need all the ideas you boys can think of to bring all of us profit and a good wage."

Eli Lilly & Co. Awards 27 Research Grants

INDIANAPOLIS, IND. — Eli Lilly & Co., Indianapolis, has awarded 27 research grants to scientists at agricultural experiment stations. Part of a continuing company program, the grants provide financial aid to scientists engaged in both basic and applied agricultural research.

Recipients of the major grants and their areas of investigation are included below:

Dr. S. L. Balloun, Iowa State University, Ames, evaluation of tylosin in turkeys; Dr. W. M. Beeson, Purdue University, Lafayette, Ind., evaluation of tylosin and other antibiotics in swine, and Dr. R. M. Melampy, Iowa State University, control of reproductive phenomena of swine and cattle.

Dr. R. L. Morter, Purdue University, evaluation of tylosin in controlling leptospiruria in hamsters, and Dr. R. L. Sweat, University of Nebraska, Lincoln, study of respiratory diseases of cattle (a joint grant-in-aid with Corn States Laboratories, Inc., Lilly veterinary subsidiary).

Dr. D. M. Thrasher, Louisiana State University, Baton Rouge, evaluation of tylosin and tylosin-streptomycin combinations in growing-finishing swine, and Dr. R. C. Wahlstrom, South Dakota State College, Brookings, evaluation of tylosin for the prevention and treatment of scours in baby pigs and levels of tylosin in creep rations for pigs.

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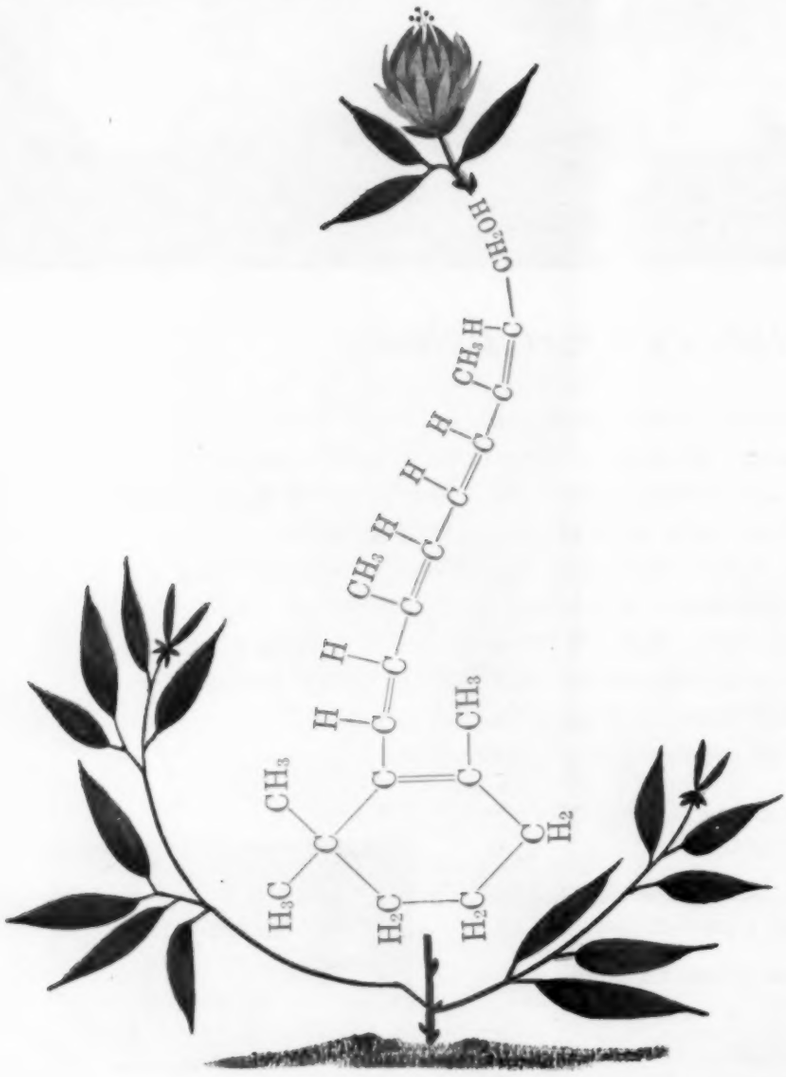

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February 1, 1961

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Here's our program: CocciVac in the water at four days. Trithiadol in the starting mash. Gas brooders. Keep litter damp enough to allow cocci to sporulate. In real dry houses the floors should be wet down enough to allow coccidiosis to sporulate. Our experience shows that some chicks will show "cocci signs" at three or four weeks of age but do not die. At eight weeks they are beautiful and they stay beautiful.

Sincerely yours,

MCBabcock

Monroe C. Babcock

MCB/b

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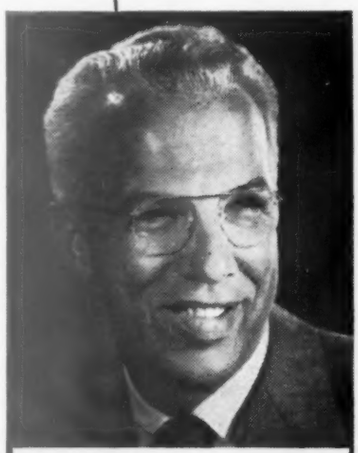

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CocciVac *Type 4 is available for broilers. Types A and B for layers and roasters — and for broilers in heavy exposure areas.*

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Case Histories Analyzed

Feed Men Consider Factors Involved In Proposed Feed Plant Projects

By ROGER BERGLUND
Feedstuffs Managing Editor

MANHATTAN KANSAS — Suppose you had a business in Kansas which included: A locker plant and meat processing operation; a feed dealership which included sale of about 1,000 tons of manufactured feed annually, a mobile mill and six tanks for bulk feed; an egg collecting and handling business. You were considering adding stationary feed milling facilities and expanding the feed operation. Would it pay to go ahead on a feed mill?

Or, suppose you were located in a community where there was no feed mill, where farmers would like to have feed milling services, but where livestock population was quite limited. Would it be possible to build and operate profitably a feed mill to serve the nearby area?

These situations were discussed as case histories at a feed plant feasibility workshop held at Kansas State University by the formula feed extension staff. The idea was to present situations where people were considering the feasibility of building feed mills and then consider whether or how it might be possible to go ahead. This, of course, involved consideration of the market area and sales potential, competitive picture, etc.

The two cases were described, and then feed men on hand for the two-day workship analyzed the situations and offered suggestions on possible solutions to the problems posed. Presentation and discussion of the case histories were among concluding features of the workshop, which was held to help feed men make sound decisions on possible mill building or remodeling projects.

(Also see stories and articles in the June 10 and 24 and July 1 issues of Feedstuffs for other material pre-

(Turn to page 68)

• • •

Technical Assistance On Mills Discussed

MANHATTAN, KANSAS — If a feed man decides to proceed with a mill building or remodeling project, he will have to go to someone for technical assistance in planning and building the facilities.

Representing the engineering, equipment and building services in discussions at the feed plant feasibility workshop at Kansas State University was G. M. Spencer, Ernest-Spencer Engineering Co., Topeka, Kansas. Mr. Spencer described his firm as one which has designed and built all types of facilities for the grain and feed industries, including "turnkey" mill jobs.

He brought out various considerations in planning and building a feed plant, including some basic information on types of plants, types of construction, etc.

Basic types of custom and other mills in the area were listed as: (1) Straight meal, (2) meal and molasses, (3) meal, molasses mixing and pelleting. In most custom mills, one will need a hammermill, a roller mill (in Kansas, mostly dry rolling), mixer, scale for measuring ingredients, molasses mixer and, in some instances, pelleting facilities.

Very important is to keep traffic flow in mind in planning a mill. Two driveways are preferred—one for receiving, another for bulk load-out.

It was acknowledged that, in some instances, feed men have not had a very good idea of the business potential in their areas but that often, after building a new mill, it has been found that more and better service has brought in more customers.

Mr. Spencer said that plants with which he is familiar have had bins ranging from 10 to 38 in number. If a firm has an operation with bulk soybean and cottonseed meals, the mill probably should have at least

(Turn to ASSISTANCE, page 70)

• • •

Advice Offered On Putting Mill Plans Into Action

MANHATTAN, KANSAS—Once a feed firm has made plans to go ahead with a mill building or remodeling project and all of the plans and financing arrangements have been made, it is necessary to establish sound sales and management programs.

The planning and management steps which follow the mill planning and building were stressed by Dr. Robert Schoeff and Richard Baker of the feed extension staff at Kansas State University in the concluding sessions of the feed plant feasibility workshop at K-State.

Here were some of the things which were listed as being necessary in putting the feed mill plans into action:

1. Communicate the plans to company personnel. Also draw ideas and suggestions from employees.

2. Employment of competent supervisory and other personnel is of vital importance. A new mill can be no better than the persons who run it.

3. Plan an effective sales program. A mill will not sell itself.

4. Set up controls to measure results. This includes cost controls and systems so that management can know costs by functions within a mill. Go back to goals and objectives and compare results with them.

Sound analysis and planning and determination of feasibility must precede any mill project, but then good management and effective cost control also are necessary.

BETTER COST RECORDS ARE NEEDED

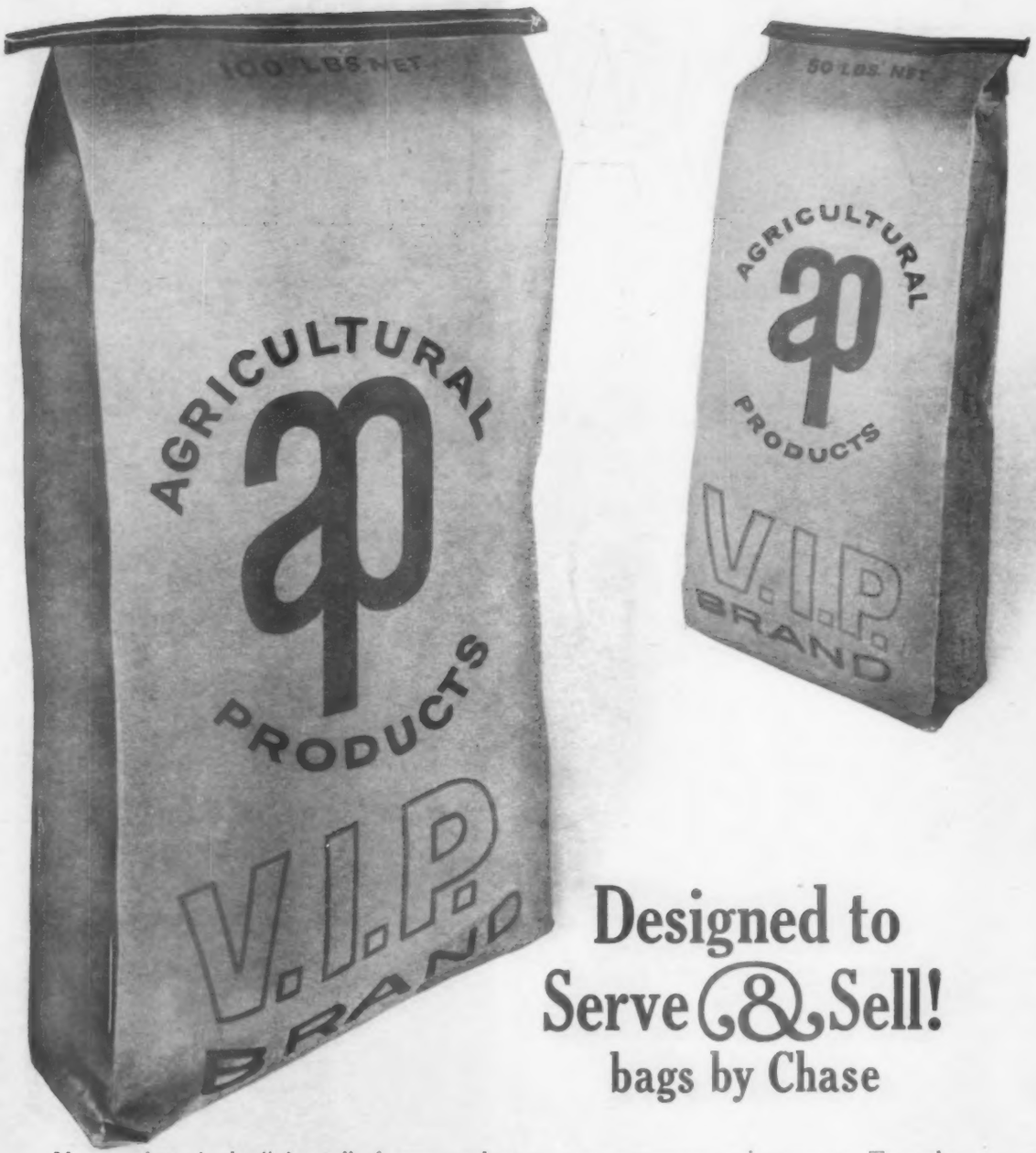
MANHATTAN, KANSAS — The fact that many feed businesses do not have good production cost records and accounting systems was brought out in discussion at the feed plant feasibility workshop at Kansas State University.

A mill builder said that he had asked operators of 10 plants—mills which cost from $30,000 to $350,000—for figures on costs per ton. He said that he was not able to get a good figure on costs per ton for feed mill operation.

One firm did say that for labor, power, depreciation and insurance, costs averaged $2.25 per ton. The average service charge was $3 per ton.

A firm whose operations included pelleting indicated that service charges averaged $4.90 per ton. Direct production costs on manufactured feed were said to be $3.75 per ton.

A question was raised on what one might expect in a local feed business in the way of profit on sales. The feed men were told that in an Ohio study of elevators and feed mills, the gross was reported at 10 to 15%, with a net of 2 to 5% profit on sales.



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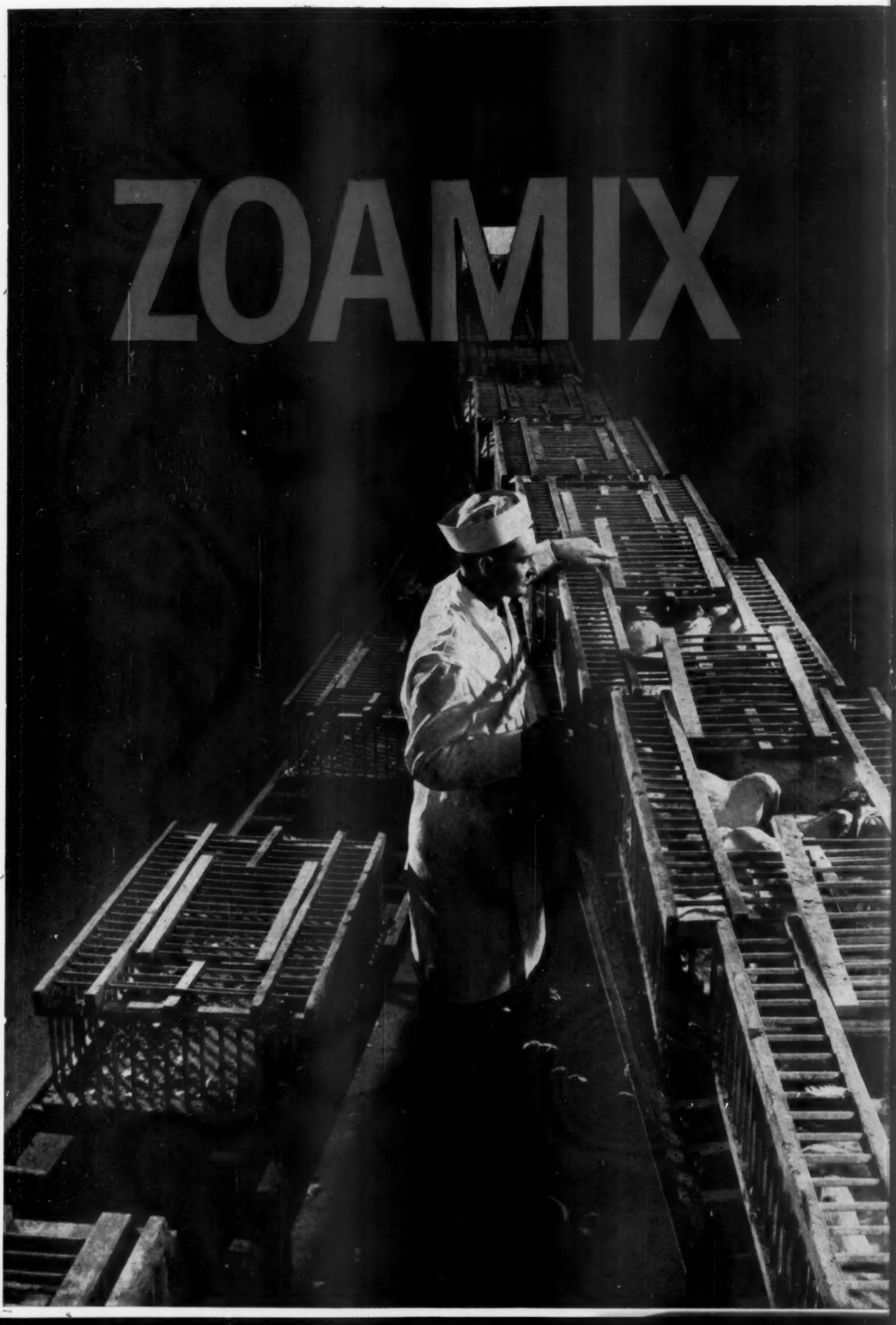
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Free educational film. "Chemicals: Vital to Our Food Supply," a 22-minute sound and color story of the contributions of chemicals to mankind, is now available for screening or group showings. Film has many references to the poultry industry. For bookings, contact your Dow Feed Industry sales representative.

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THE DOW CHEMICAL COMPANY DOW Midland, Michigan

BULK FAIR IN ST. PAUL—Representatives of 60 manufacturers were on hand with over $500,000 worth of equipment at the fourth Butler Midwest Bulk Feed Fair held recently at the Minnesota State Fairgrounds in St. Paul. Butler Manufacturing Co., Kansas City, and other equipment companies cooperated in the two-day event. Photo shows part of the equipment display that attracted visitors from midwestern states and Canada. Equipment displayed at the fair included bulk storage, handling and delivery equipment, mobile mills and other feed handling and processing facilities.

sented and discussed at the workshop.)

Without going into the details of the individual situations, it may be of interest to note some of the suggestions and comments made by the feed men attending the workshop.

CASE HISTORY 1—This was the situation involving the locker plant, produce business, mobile mill, etc. The owner indicated that his total business currently was about $250,000 a year, with the meat processing part of the operations increasing most. Asked whether the mobile mill was making a profit, the owner said that at first it lost money but that now, with a new operator, it was returning a "good net."

He said that if he started a new stationary mill, he also would retain the mobile mill. The owner said that there should be a good potential for more business but that there were problems of capital and personnel, among others.

Here are some of the points brought out in discussions:

—For one thing, it was suggested that the business be incorporated.

—One possibility would be to drop all parts of the business except meat processing and the locker plant and concentrate capital and efforts on that.

—Another would be to analyze the feed potential, equipment and personnel needs, see whether extra lines could be added without extra help, and possibly expand with present facilities.

—Or, it might be possible to expand in feed but still stay in the poultry and egg and meat businesses. It might pay to consider instituting a small grain bank operation.

—In all of this, one feed man said, it would appear that the management might not have enough experience in all aspects of the business—feed, poultry, meat, etc.—and that it would be necessary to employ a good specialist to run the feed part of the business. This could be a key factor.

—Another suggestion was to consolidate the business in one location. The present facilities are at different locations. One feed man said the operations were too scattered and that this would present problems if an effort were made to expand in feed.

—One proposal was that the owner try to consolidate the mobile operation and operate the mobile unit at the town location as a stationary mill part of the time, using bulk tanks, and possibly having a grain bank operation. The owner said, however, that his mobile unit currently was busy most of the time in the field.

—Also suggested was the possibility, in view of the existing produce business, of instituting some type of quality egg program which also would increase the need for feed.

—No general conclusion was reached. However, the need for sound market analysis, long range planning, etc., was brought out in connection with this or any other feed business.

CASE HISTORY 2—This situation involved a community with a limited livestock population. There was some optimism that livestock production would increase eventually because of the availability of grain. However, on the basis of the limited livestock population, other mills in the general area, etc., it would not be profitable to go ahead with a new mill. Nevertheless, comments were made by the feed men which are of general interest to anyone contemplating a new or expanded feed operation.

—One feed man put it this way: "We don't have all the facts necessary to make a decision, but if one were to make available all the services (grinding, rolling, shelling, pelleting, storage, etc.) which some people want, I would recommend that my competitor build the plant. The minimum investment in a mill would be about $175,000 if one were to offer all the services mentioned as desirable by farmers in the community."

—It was stated that if one averaged $6 per ton on everything going through the plant, and if he had about all of the milling business in the community, he still would not have enough gross.

—One feed man said that the goal in his firm is to net $1 per ton on

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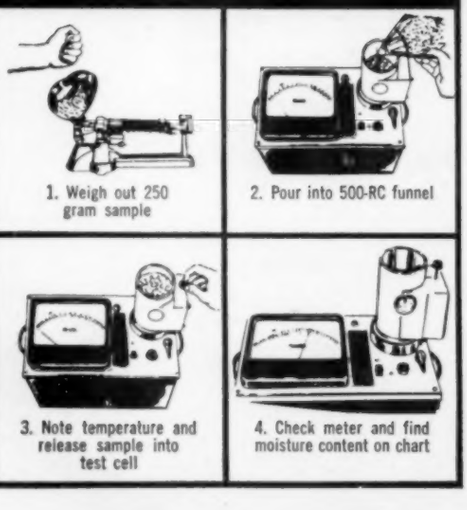
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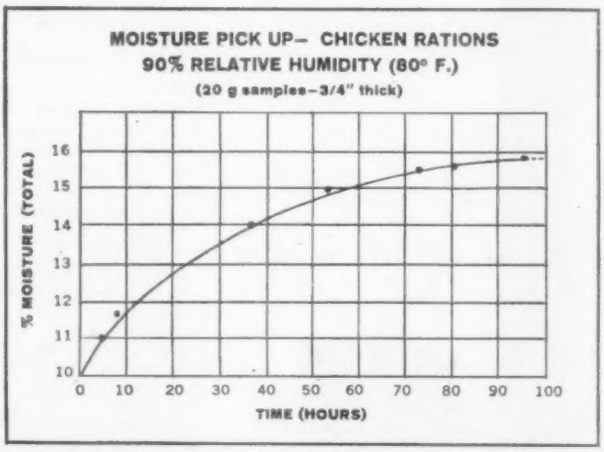

Graph above indicates the rapid moisture build-up within hours of storage. Table below shows how low levels of economical Du Pont "Impedex" double the mold-free life of typical poultry feeds at various moisture levels.

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% moisture	No "Impedex"	0.10% "Impedex"	0.15% "Impedex"	0.20% "Impedex"
Days of mold-free life at 90° F.				
13	7-17	23-30+	30+	30
15	3-9	8-17	15-26	25-30+
17	2-6	5-10	7-12	11-15
Days of mold-free life at 70° F.				
13	14-30+	30+	30+	30+
15	6-18	16-30+	30+	30+
17	4-12	10-20	14-24	22-30

Distribution delays . . . storage in hot, humid bulk and tank cars, warehouse and dealer bins . . . all pave the way for mold to take hold and reduce the quality of the best of feed. Now Du Pont "Impedex" helps you extend quality control over your feed *after* it leaves your plant.

Du Pont "Impedex" guards against mold growth throughout distribution . . . right up to the farm feed bin itself. Here's why: When feeds begin to heat, mold development takes place. To stop mold before it can start, "Impedex" attacks the cause of mold by retarding heating in feeds, even in hot, humid storage. It can double, even triple the storage life of commercial feed ingredients and formulations . . . helps preserve their freshness, protein quality, color and palatability.

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- **protects the high quality you put in the bag**
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feed going through the mill but that in this case it would be 50¢ or less. Even if one were most optimistic and figured on 8,500 tons a year through the mill—after also figuring on capital required for accounts receivable and inventory, there would be no net at all after also figuring interest on the money invested.

—It was pointed out that, if there was the possibility of more livestock later, a strong educational campaign would be needed in this or similar areas to increase interest in animal agriculture.

—One suggestion was to start a custom feedlot in connection with a mill. This would increase feeding and provide some "captive" feed tonnage. However, it was noted that this also would increase capital requirements for anyone involved. Also, one person said that it would not be possible at a new feedlot in this area to offer the veterinary service, nutrition service, etc., that was available at a large custom feedlot in the region.

—Another suggestion was to start with a roller and a mixer, a feed plant costing $40,000 or $50,000, a feedlot where one would feed his own and farmers' cattle.

—In general, however, it appeared that there was not much interest in a major feed mill project in this area.

ASSISTANCE

(Continued from page 64)

15 bins. This might include four grain bins, eight bins over a hopper scale, a bin for a molasses mixer if molasses mixing is to be done and three bins for load-out (two equipped with reversing screw feeders so that feed also can be run back into the hopper scale).

Mr. Spencer listed the various engineering and building services available. These include professional engineers (who may charge ½% for preliminary work and 5 to 6% if the feed firm builds from the engineer's plans); machinery manufacturer representatives, where the manufacturer provides plans and specifications and construction and installation work is sublet; machinery firms which provide the engineering along with sale of equipment; local millwrights who may get engineering and plans from machinery firms; contractors who provide engineering along with building and installation in a "turnkey" price, where engineering services are in the total price but may average about 4% per job.

Costs of plants vary greatly, Mr. Spencer noted. He said that in a project costing up to $50,000, construction may be wood frame. In the case of mills costing from $50,000 to $250,000, steel plants generally are built. Above $250,000, slip-form concrete may be used.

PENB Sets Dates for '62 Annual Meeting

CHICAGO — The Poultry & Egg National Board has announced that its 22nd annual meeting will be held at the Palmer House in Chicago March 19-21, 1962, according to Lloyd H. Geil, general manager.

The 1962 fall board of directors meeting will be held in Chicago's Bismarck Hotel Nov. 1. The PENB 1961 executive committee meetings are scheduled for July 19 in Minneapolis during the American Poultry & Hatchery Federation session, and Oct. 31 in Chicago. The committee's 1962 meetings are in February at a time to be selected during the Fact Finding Conference in Kansas City, and March 19 in Chicago.

Being planned by an industry-wide committee in cooperation with the PENB staff, the annual meeting will provide an opportunity to gain up-to-the-minute ideas on increasing egg and poultry meat consumption. Internationally-known authorities will give profit-making tips, sharply directed to the egg and poultry industry.

Poultrymen will become better acquainted with PENB's rapidly-expanding promotional programs and play key roles in shaping future programs through special sessions at the annual meeting. "This meeting is being planned to benefit everybody in the egg and poultry and related industries," Mr. Geil emphasized.

Tops Class at 53

WHITE RIVER JUNCTION, VT. —A nearby woman feed dealer and 53-year-old grandmother, Mrs. Marguerite B. Maxfield of North Hartland, Vt., graduated with honors from Junior College of Albany, Albany, N.Y., completing a two-year course of study in the general business branch as top student.

Her high school education interrupted by marriage in 1926 and raising a family of seven children, then interests in 16 grandchildren, Mrs. Maxfield resumed her studies in 1959 after passing a high school equivalency test. For the past two years she roomed in Albany and returned week-ends to the farm, feed and coal business, and other business activities in North Hartland.

Besides managing the Maxfield Coal & Feed Co., North Hartland, with her sons, she operates a 700-acre dairy farm there, a roadside stand and a maple syrup production and sales business. She has served as secretary of the New England Milk Producers Assn. local in Windsor, Vt.

Post-graduate plans, she says, are to spend several months in South America to perfect her Spanish.

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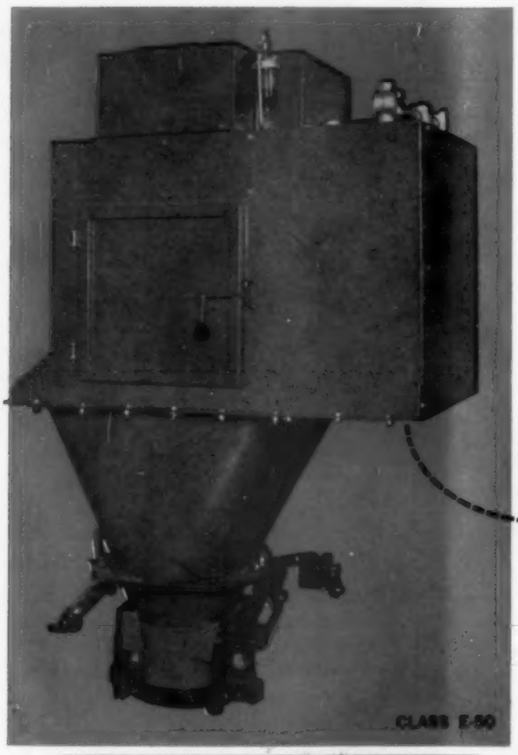

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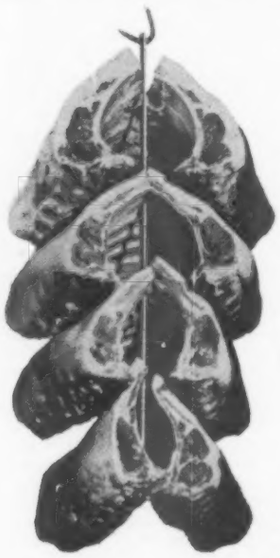

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BEEF QUALITY as Influenced by Cattle Rations and Cattle Feeding

By Dr. J. K. Matsushima
University of Nebraska

In order to produce the quality of beef which the consumer desires, there are several segments of the beef industry that are vitally concerned. It would be wonderful if we could come up with a beef production program in which (a) the breeder or the cattle producer could breed the kind and quality of cattle that the feeders want, (b) and subsequently, if the feeder could feed the cattle in such a manner that they would produce economically readily merchandisable carcasses, (c) so that the carcass would be of such quality and have the characteristics sought by the processor and the consumer.

Unfortunately, there must be a weak link or two in our beef production program today. Why is it that our highest grading beef, prime grade, is one of the less desirable grades as far as the general consumer is concerned? Why is it that prime grade cattle command the highest prices at the market? Why do we produce prime cattle when so much fat must be trimmed from the carcasses of these cattle? Why is it that we do not pay the producer a premium if he can consistently feed his cattle so that they will produce the kind of beef which satisfies the processor and the consumer?

I think the answers to many of these questions are obvious. I am sure that all the cattle feeders across the nation would be willing to do their part in producing the quality of beef the consumer desires if proper feeding and management will contribute to this cause and if a fair price return is given.

Quality Standards

Apparently there are no definite standards to measure "beef quality" (1) (2) (3). Doty (1) proposed a rather simple definition: "Quality may be the summation of distinctive traits or special features that determine the ultimate acceptability of the product to the consumer." He admitted, however, that even this definition raises questions and problems.

If we were to adopt the specifications for high quality beef generally expressed by the consumer, usually the housewife, it would be rather difficult to satisfy her regularly. The following are her requirements or specifications: The beef must be tender, have good flavor, sufficient marbling, juicy, bright red color, limited amount of fat trim, no bone and, above all, it must be economical in price.

The packer buyer and the processor have their specifications or standards which they would like to use to evaluate high quality beef carcasses. The following points were suggested by one of the representatives of a large packing firm (4): Choice or prime grading carcass, 1.8 sq. in. of loin eye area per hundredweight of carcass, less than .15 in. of fat cover over the loin eye per hundred pounds of carcass, an abundance of marbling in the eye muscle, the round, loin and rib should make up over 49% of the carcass and the cattle should dress over 60%.

Feeders' Contribution

This presentation is not intended to elucidate the various factors that are associated with beef quality. There is no doubt that the producer or the feeder can contribute his share in producing the kind and quality of product the consumer wants. Occasionally, the producer feels that he has the right kind of cattle with a desirable degree of finish, but is questioned by the packer buyer and ultimately receives a lower price than expected. The buyer may put the blame on a certain feed or feeding practice. He may be right, and then again, he may be wrong.

Pierce (3) states, "Most of the complaints regarding grading originate with the packers. Producers also criticize grading. In both instances, the volume of complaints is usually influenced by the supply and price situation." Even though this may be a fact, the producer and the processor should be in agreement and understand what the general relationships are between some of the feeds and feeding practices and the quality of beef produced.

EFFECT OF FEEDING SILAGE—Silage is fed very commonly in fattening rations by many midwestern cattle feeders. This has been a standard practice and a very economical one for many years and will probably continue in many feeding programs. There is no basic reason for the discrimination against fat cattle which have been fed silage for their roughage as long as the cattle are not fed excessively high levels of silage throughout the finishing period.

PROTEIN SUPPLEMENT—QUANTITY, SOURCES, MIXTURES, ETC.—In most cattle rations the highest-priced ingredient is the protein supplement. Since most cattle feeders use a protein supplement there are several decisions they must make in selecting their protein supplement. The price of the supplement is obviously an important one.

EDITOR'S NOTE: *Dr. Matsushima, professor in the department of animal husbandry at the University of Nebraska, presented this article as an address during the recent Cattle Feeders Day program on the campus of Iowa State University, Ames.*

Feeding excessive amounts of protein will not increase the carcass grade (5) (6) (7) (8) (9). The optimum crude protein level for cattle fattening rations appears to be about 11%, and possibly lower (10.0 to 10.5%) for long yearlings or older cattle. Although a slightly excessive amount of protein may increase the palatability of the ration and thus increase the feed intake, usually the additional cost of the supplement will not offset the value returned from the extra gains.

Of course, limiting the protein in the ration, particularly for cattle that are being fattened at a young age, could affect the carcass grade (10) and possibly the carcass composition. The limitation or restriction of protein below the optimum level usually results in lower gains and feed consumption, hence, lower fat deposition in the carcass.

Protein supplements from the various sources when fed as a mixture or individually do not influence the quality of beef carcasses (11) (12). Illinois data (11) do not show any difference on carcass quality from feeding soybean oil meal, cottonseed meal and linseed oil meal when fed separately or in combinations. However, the carcass grades and feedlot gains were nearly the same for all comparisons and, therefore, it is unlikely that there would be much difference in the carcass quality.

A new type of supplement, liquid protein supplement (Morea), has been recently added for commercial use. Limited research data do not show any improvement in gain (13) (14) (15) with little or no improve-

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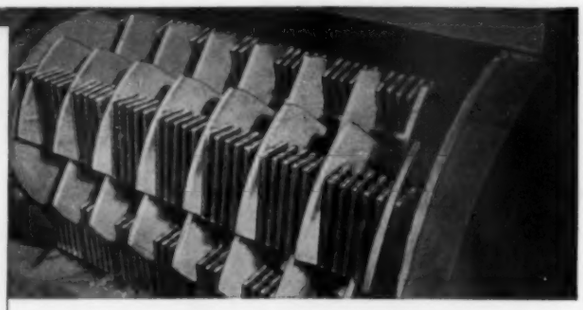

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ment in dressing percent or carcass grade (14) (15).

FEED ADDITIVES—Various feed additives are now available on the market. Most of these are intended to stimulate gains and/or increase the efficiency of feed utilization.

Antibiotics are not used very extensively in beef cattle rations. However, feeders who do use antibiotics rather regularly generally add them to rations where young cattle are finished at light weights. Limited data are available on carcass grades and most of the tests show very little advantage by feeding antibiotics (16) (17) (18) (19).

Dynafac, tranquilizers and enzymes are also available for beef cattle feeding but are not used very extensively. The feeding tests which have been made with these additives indicate some variability in response to gains and efficiency of feed utilization. However, the general conclusion from these tests is that there is very little advantage, if any, gained by the addition of dynafac, tranquilizing compounds or enzymes to most fattening rations. The feeding of dynafac to cattle in several tests (20) (21) (22) (23) (24) (8) has shown no differences in carcass grades, marbling score or dressing percentage as compared to non-supplemented cattle. Also, experiments dealing with tranquilizers (25) (26) (27) (28) (29) (30) and enzymes (31) (32) (33) (34) did not indicate any increase in dressing percentage or carcass grade.

Use of Stilbestrol

Many controversial issues have been raised for several years over the effect of stilbestrol, whether it is administered orally or as an implant, on beef quality. There is no doubt that most cattle feeders have benefited a great deal by using stilbestrol through the increased gains of cattle and less feed cost per pound of gain.

However, the lack of information on the appropriate use of stilbestrol, and possibly improper management and other factors, has been greatly responsible for these controversies on the quality of beef produced from cattle treated with stilbestrol.

Considerable information on stilbestrol, used under various conditions, has been collected over the past six or seven years. By reviewing the results which have been accumulated, it is rather evident that one or more of the following points could account for the wide diversities in the appraisal of carcasses from cattle fed or implanted with stilbestrol:

(a) Inadequate protein in fattening rations will result in very little response, particularly in gains (35) (36), from stilbestrol. Could it be possible that feeders have attempted to substitute stilbestrol for protein? Of course, it should be emphasized here that excessive levels of protein in the presence of the stilbestrol will not increase gains, carcass grade or marbling (8).

(b) Stilbestrol will increase carcass protein (more lean) and decrease fat deposition (37) (38) (39) (40) (41) (42) (43) (44) (45). Additional tests would probably support this where only rib eye area data were reported (46) (47).

(c) The Wisconsin (37) data indicated that stilbestrol has more influence on protein deposition with less on fat deposition in the carcass during the early part, within 56 to 112 days, following stilbestrol treatment. The protein deposition becomes less pronounced and fat deposition

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increases with prolonged stilbestrol supplementation.

This information fits in very closely with the South Dakota results (8) where very little difference in marbling score and rib eye area was found between the treated and non-treated group of cattle that were fed a considerable length of time (200 days). The treated cattle had a thicker covering of fat. California researchers (42) obtained similar results.

This indicates that if stilbestrol is used in a feeding program, cattle must be fed a fattening ration approximately 150 to 175 days to have a comparable amount of fat cover to grade (under the present grading system) equally as well as non-stilbestrol treated cattle. The Nebraska data (45) indicate that length of feeding and rate of gain (associated with feed intake) could have an effect on fat deposition and carcass grade.

(d) Stilbestrol treated cattle usually begin to show more "bloom" than non-treated cattle after they have been on feed approximately 100 days (45). If "bloom" is used as a measure of finish, this could possibly result in an overestimate of the live animal by the buyer in relation to the slaughter grade and carcass value.

Points to Consider

Several other pertinent points pertaining to cattle feeding should be recognized if we are to put forth our efforts in producing "quality beef." The following points may not necessarily produce the cheapest and most economical gains but certainly may be worthy of consideration. It should also be recognized that various factors, such as breeding (inheritance), age, environment, etc., may change the final outcome a little in some cases and perhaps rather markedly in others.

1. The later developing parts of the body include the loin and hindquarters (10) (48). Therefore, the plane of nutrition of the cattle prior to fattening and the rate of gain during the fattening period may influence the carcass composition and quality of beef (7) (49) (50) (51)—e.g., submaintenance ration during pre-fattening followed by rapid gains on high energy ration to yearling steers will produce carcasses with excess amount of subcutaneous and intermuscular fat and deficient in amount of intramuscular fat.

2. Within certain limits, as the age of animal increases, the tenderness of beef decreases (52) (53). Also with increasing age, lean muscle becomes more coarse textured and more highly pigmented (54). Age of an animal apparently has little influence on the percentages of various cuts of beef (55) (56).

3. Sex does not have an effect on carcass composition, finish and in the percentage of certain wholesale cuts (41) (56) (57).

4. Grain-fed beef may excel in flavor of fat and lean, juiciness and tenderness as compared to grass-fed beef (58). This statement could be rightfully challenged since we have a wide diversity of feeding programs, quality of grasses, etc.

5. Feeding excessively high levels of energy (by fortifying the ration with fats and oils) will not improve carcass grade (59) (60) (61).

Since the endocrine system (hormones) plays a significant role in the performance of animals, we will probably be hearing more about them.

The Nebraska Experiment Station has a rather extensive program under way involving the use of hormones (testosterone and thyroxine) in an attempt to produce carcasses that will have more lean, minimum fat cover and beef qualities preferred by the consumer. Many experiment stations are currently placing more emphasis on carcass quality in connection with their feeding tests.

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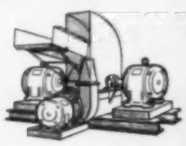

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rent carcass grading standards, we should be able to more nearly supply the processors and the consumers with the kind and quality of beef they prefer.

v v

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Grain Bank Started

WINTERS, TEXAS — The Alderman-Cave Milling & Grain Co. has started a grain bank for farmers, said to be the first of its kind in this part of the country. Since the present owners, Charles C. Cave, Ray Alderman, Weldon Edwards and James Snyder, bought the facilities of the C. L. Green Milling Co. through a bankruptcy sale, they have been enlarging the plant.

This includes an outlay of $60,000 for automatic milling equipment and additional grain storage. The new firm will do custom mixing and also put out a feed under its own brand name.

One feature of the plant will be a grain bank system similar to those in use in the Midwest. However, farmers and ranchers will be allowed to store their grain free of charge. After it is mixed with a supplement by the mill, there will be a charge for delivering it to the owner's farm.

Ray Miller, who has experience as a feed mill manager at two west Texas towns, is manager of the new company.

General Mills Dividend

MINNEAPOLIS—The board of directors of General Mills, Inc., Minneapolis, has declared a dividend of 30¢ per share on General Mills, Inc., common stock, payable Aug. 1, 1961, to stockholders of record July 10, 1961.

This is the 132nd consecutive quarterly dividend on General Mills common stock.

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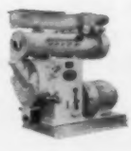

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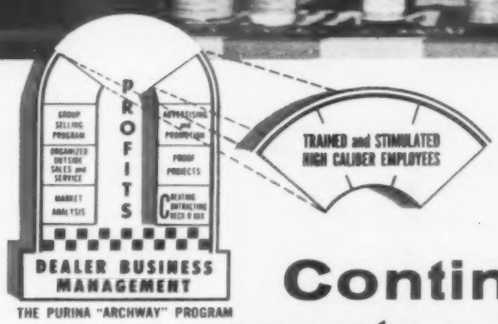
"Purina Health Aids," explains "Sales Partner" Harry J. Brown, "include many products to control pests that sap the farmer's profits." Regular monthly training meetings in Carmi, Illinois, are attended by dealers, outside service men, mill men and office staffs.



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The subject of the meeting may be a new program to help farmers produce meat, milk or eggs at lower cost and with less labor. It might be a new product to help solve problems on the farm. It could be a new, on-the-farm service to be offered.

No matter what turn the meeting should take, it always stresses service to agriculture. Growing tonnage of so many Purina Dealers proves that superb service is solid selling.

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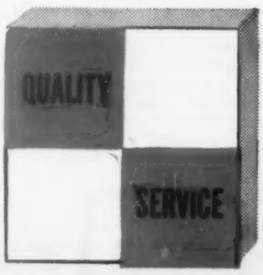

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(Continued from page 16)

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Sept. 17-19—Northwest Retail Feed Assn.; Hotel Pick-Nicollet, Minneapolis, Minn.; sec., W. D. Flemming, Grain Exchange Bldg., Minneapolis 15.

Sept. 18-19 — Pet Food Institute; Drake Hotel, Chicago, Ill.; sec., Clyde Kassens, 333 N. Michigan Ave., Chicago 1.

Sept. 19-21 — Marketing Seminar for Feed Manufacturers; Morrison Hotel, Chicago; Sales Executives Council, American Feed Manufacturers Assn.; W. E. Glennon, president, 53 W. Jackson Blvd., Chicago.

Sept. 19-27—International Conference on Fish in Nutrition; Washington, D.C.; sec., Dr. Erik Heen, Chief, Fisheries Technology Branch, Food and Agriculture Organization, Washington 25.

Sept. 21-23—Arkansas Feed Manufacturers Assn.; Mountain Inn, Fayetteville; sec., J. W. Cobb, Box 391, North Little Rock.

Sept. 22-23 — Iowa Feed Conference; Memorial Union, Iowa State University, Ames; chm., Dr. C. E. Summers, Animal Husbandry Dept.

Sept. 24-26—Southeastern Feed Production School; Continuing Education Center, University of Georgia, Athens.; sec., Southeastern Poultry & Egg Assn., Harold E. Ford, 235 Ponce de Leon Ave., Decatur, Ga.

Sept. 27-29—12th Animal Care Panel; Statler Hilton Hotel, Boston, Mass.; chm., Dr. B. F. Trum, Director, Animal Research Center, Harvard Medical School, 25 Shattuck St., Boston 15.

Sept. 27-29—National Feed Ingredients Assn.; Lake Lawn Lodge, Delavan, Wis.; sec., I. Levin, 517½ E. Locust St., Des Moines 9, Iowa.

Sept. 27-29—Pennsylvania Millers & Feed Dealers Assn.; Hotel Hershey, Hershey, Pa., sec., D. W. Parke, P.O. Box 329, Ephrata, Pa.

Sept. 28—Vermont Feed Dealers and Manufacturers Assn.; University of Vermont, Burlington; sec., D. C. Henderson, Hills Agricultural Science Bldg., Burlington, Vt.

Sept. 28-29 — Arkansas Formula Feed Conference; University of Arkansas, Fayetteville; Dr. E. L. Stephenson, animal industry and veterinary science department.

Oct. 2-3—Washington Poultrymen's Institute; Centralia Junior College; Dr. Leo Jensen, Poultry Science Dept., Washington State University, Pullman.

Oct. 3-5—Northeastern Poultry Producers Council Exposition and Convention; Farm Show Bldg., Harrisburg, Pa.; sec., Richard I. Ammon, 10 Rutgers Place, Trenton 8, N.J.

Oct. 4-6—Texas Nutrition Conference; Texas A&M College, College Station; chm., Dr. J. R. Couch, Poultry Science Dept.

Oct. 8-10—Poultry Industries of Louisiana; Bellemont Motor Hotel, Baton Rouge. La.; sec., Stella Jones, Poultry Industry Dept., Louisiana State University, Baton Rouge.

Oct. 10-11—Iowa Poultry Convention; Veteran Memorial Auditorium,

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Oct. 15-20—School of Executive Development in Business Management, Unit III; Continuing Education Center, University of Georgia, Athens; sec., Southeastern Poultry & Egg Assn., Harold E. Ford, 235 Ponce de Leon Ave., Decatur, Ga.

Oct. 16-17—California Animal Industry Conference; Fresno Memorial Auditorium, Fresno, Cal.; co-sponsored by California Hay, Grain & Feed Dealers Assn. and University of California; sec., California Hay, Grain & Feed Dealers Assn., Leo L. Johnson, Blue Anchor Bldg., 1400 10th St., Sacramento, Cal.

Oct. 23-25 — Centennial Nutrition Conference; Hotel Muehlebach, Kansas City 5, Mo.; sponsored by Midwest Feed Manufacturers Assn. and Land-Grant Colleges in Midwest's area; executive vice president, Lloyd S. Larson, 20 W. 9th St. Bldg., Kansas City 5, Mo.

Oct. 24-25—Virginia State Poultry Federation; Hotel John Marshall, Richmond, Va.; sec., J. Paul Williams, 615 E. Franklin St., Richmond 19.

Oct. 24-25—Indiana State Poultry Assn.; Hotel Severin, Indianapolis; sec., Robert L. Hogue, Poultry Science Bldg., Purdue University, Lafayette.

Oct. 26-28—Association of American Feed Control Officials; Shoreham Hotel, Washington, D.C.; sec., Bruce Poundstone, Head, Feed and Fertilizer Control Dept., University of Kentucky, Lexington.

Nov. 1—Animal Nutrition Research Council; Shoreham Hotel, Washington, D.C.; sec., Dr. Philip Derse, Wisconsin Alumni Research Foundation, 506 Walnut St., Madison 5, Wis.

Nov. 1-2—Kansas Poultry Assn.; Broadview Hotel, Wichita; sec., Harry J. Reed, Box 663, Manhattan.

Nov. 1-3—Cornell Nutrition Conference; Statler Hilton Hotel, Buffalo, N.Y.; chm., Prof. Douglas E. Hogue, Animal Husbandry Dept., Wing Hall, Cornell University, Ithaca, N.Y.

Nov. 8-9—Illinois Feed Assn.-Illinois Poultry and Hatchery Federation joint convention; Springfield Armory, Springfield; sec. I.F.A., Dean M. Clark, 141 W. Jackson Blvd., Chicago 4; sec., I.P.H.F., Aubrey Harless, Shelbyville, Ill.

Nov. 9-10—National Swine Industry Conference; Statler-Hilton Hotel, St. Louis, Mo.; chm., Keith Myers, Grundy Center, Iowa.

Nov. 13-14 — Washington Animal Industry Conference; Skagit Valley College, Mount Vernon, Wash.; John G. Wilson, mgr., Washington State Feed Assn., Inc., 814 Second Ave. Bldg., Seattle 4.

Nov. 16-19—Florida Nutrition Conference; Grand Bahama Hotel, West End, Grand Bahama Island; chm., Dr. J. P. Feaster, Animal Husbandry and Nutrition Dept., University of Florida, Gainesville.

Nov. 17-18—Tennessee Feed Manufacturers Assn.; Chisca Downtown Motel, Memphis, Tenn.; sec., C. H. Warfield, 200 American Trust Bldg., Nashville, Tenn.

Dec. 5-6—North Dakota Turkey Convention; Civic Center Auditorium, Fargo; sec., North Dakota Turkey Federation, Irving J. Mork, Box 2408, State University Station, Fargo.

Dec. 6-7—Missouri Poultry and American Poultry & Hatchery Federation Midwest Quickie Convention; Hotel Continental, Kansas City, Mo.; sec., Missouri Poultry Improvement Assn., E. M. Funk, Box 568, Columbia, Mo.

Dec. 7-8—Michigan Feed and Grain Dealers Assn.; Pantland Hotel, Grand Rapids, Mich.; sec., Nevels Pearson, Box 472, East Lansing.

Dec. 7-8—North Carolina Animal Nutrition Conference; North Carolina State College, Raleigh; chm., Dr. G. H. Wise, Animal Nutrition Section, Animal Industry Dept.

1962

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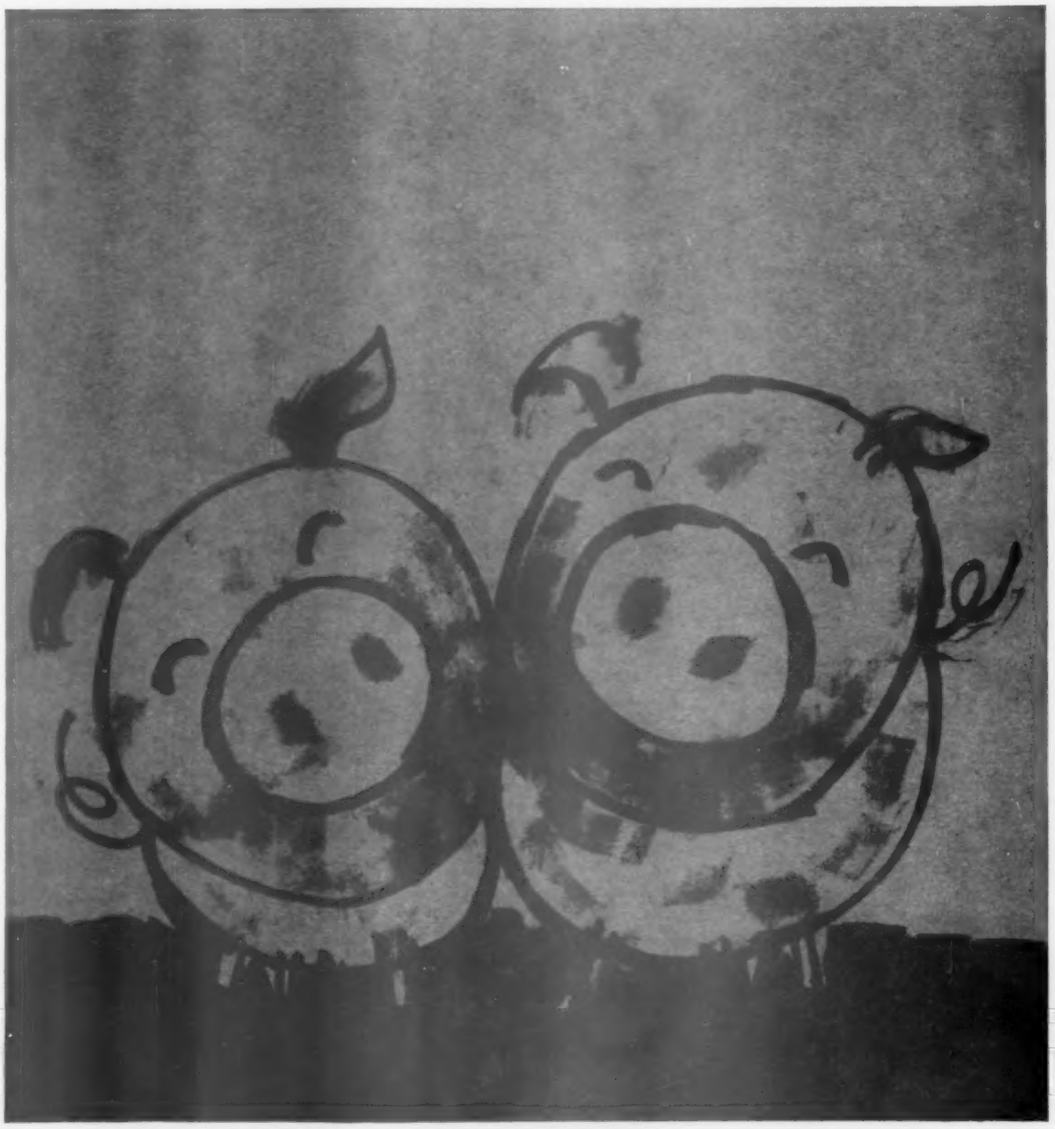

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Jan. 29-31—Southeastern Poultry & Egg Assn.; Municipal Auditorium, Atlanta, Ga.; sec., Harold E. Ford, 235 E. Ponce de Leon Ave., Decatur, Ga.

Feb. 4-6—Wyoming Grain, Feed & Seed Dealers Assn.; Townsend Hotel, Casper, Wyo.; sec., Everett L. Berry, Box 118, Sheridan, Wyo.

Feb. 5-7—Association of Southern Agricultural Workers; Jacksonville, Fla.

Feb. 9-11—Poultry Fact Finding Conference; sponsored by Institute of American Poultry Industries; Municipal Auditorium, Kansas City, Mo.; pres., Harold M. Williams, 67 E. Madison, Chicago 2, Ill.

Feb. 14-15—Pacific Northwest Feed Mill Production School; Benjamin Franklin Hotel, Seattle; sponsored by Washington State Feed Assn.; mgr., John G. Wilson, 814 Second Ave. Bldg., Seattle 4.

Feb. 16—Washington State Feed Assn. annual convention; Benjamin Franklin Hotel, Seattle; mgr., John G. Wilson, 814 Second Ave. Bldg., Seattle 4.

Feb. 20-21—Virginia State Feed Convention and Nutrition Conference; Hotel Roanoke, Roanoke, Va.; sec., Virginia State Feed Assn., J. Paul Williams, 615 E. Franklin St., Richmond 19, or Prof. Paul M. Reaves, Dairy Science Dept., Virginia Polytechnic Institute, Blacksburg.

Feb. 26-March 1—Colorado Livestock Days; Colorado State University, Fort Collins; chm., Dr. C. D. Story, head, Animal Science Dept.

March 15-16—Oregon Feed & Seed Dealers Assn.; Sheraton Hotel, Portland; sec., Russ Hays, Lewis Bldg., Portland 4.

March 19-21—Poultry and Egg National Board; Palmer House, Chicago, Ill.; mgr., Lloyd H. Geil, 8 S. Michigan Ave., Chicago 3.

March 21-23—Grain & Feed Dealers National Assn.; Denver-Hilton Hotel, Denver, Colo.; Secretaries Circle meetings March 19-20; sec., Herbert L. Sharp, 401 Folger Bldg., 725 - 15th St. N.W., Washington, D.C.

March 28—Commercial Egg Clinic; Texas A&M College, College Station; B. C. Wormeli, Extension Poultry Husbandman.

April 9-10—National Institute of Animal Agriculture; Purdue University, Lafayette, Ind.; sec., Karl D. Butler, P.O. Box 521, First National Bank Bldg., Ithaca, N.Y.

April 10-12—Animal Health Institute; Statler-Hilton Hotel, Washington, D.C.; sec., D. L. Bruner, 512 Shops Bldg., Des Moines 9, Iowa.

April 18—Nebraska Feeders Day; University of Nebraska, Lincoln; chm., Dr. Robert M. Koch, Animal Husbandry Dept.

April 26-28—Texas Grain & Feed Assn.; Hotel Texas, Ft. Worth; sec., R. B. Bowden, 504 Ft. Worth Club Bldg., Ft. Worth 2.

April 26-28—California Hay, Grain & Feed Dealers Assn.; Biltmore Hotel, Los Angeles, Cal.; sec., Leo L. Johnson, 1400 10th St., Sacramento 14, Cal.

April 26-28—Kansas Grain & Feed Dealers Assn.; Broadview Hotel, Wichita, Kansas; sec., Orris E. Case, 609 Wiley Bldg., Hutchinson, Kansas.

May 10-12—American Feed Manufacturers Assn.; Conrad Hilton Hotel, Chicago, Ill.; sec., W. T. Diamond, 53 W. Jackson Blvd., Chicago 54.

Aug. 13-18—12th World's Poultry Congress; Show Grounds of the New South Wales Royal Agricultural Society, Sydney, Australia; Dr. Cliff D. Carpenter, chairman, U.S. Participation Committee, 1207 Emerald Bay, Laguna Beach, Cal.; Dr. A. William Jasper, secretary, c/o AFBF, 2300 Merchandise Mart, Chicago 54, Ill.

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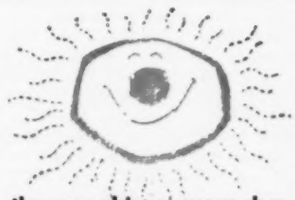

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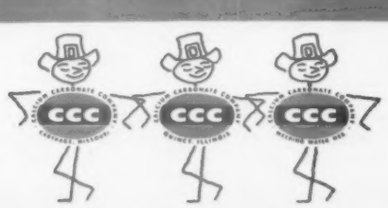

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SALES MANAGEMENT, SALES TRAINing and/or personnel position. 15 years' feed industry experience. Dealer, salesman, manufacturer, service man, assistant salesmanager, divisional sales training supervisor. Age 36. B.A. degree plus. North midwest preferred. Address Ad No. 7015, Feedstuffs, Minneapolis 40, Minn.

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SALES MANAGER FOR PROGRESSIVE firm specializing in vitamins for feed industry. Must have good writing ability, knowledge of feed field, especially poultry, some technical background in chemistry or nutrition, must be willing to travel extensively and relocate in New York City area. Send in confidence complete data and salary requirement. All of our employees know of this ad. Address Ad No. 7019, Feedstuffs, Minneapolis 40, Minn.

WE OFFER THE RIGHT MEN THE OPportunity to become associated with our expanding organization as feed salesmen. We have openings in three territories: Southeast Colorado, south central Kansas and north central Iowa. You must have recent wholesale experience in feed sales, age 25-45, and have initiative and ability to aid in the continuation of our growth. The positions afford an excellent starting salary, bonus, expenses, a company car and well planned fringe benefits. Our men know of this advertisement. Your reply stating full background of education and experience, including salary requirement and age will be held in the strictest confidence. Address Ad No. 7016, Feedstuffs, Minneapolis 40, Minn.

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If you have a record of earning more than $12,000.00 per year selling feed additives, feed premixes and livestock and poultry health products, and would like to double your income, we would like to hear from you. The position we have open is in an established territory. The potential of this territory, however, has only been scratched. Earned commissions must top $25,000.00 per year. This is not a job for a beginner; we want a man who can show us proof that he can sell. We will examine his record carefully. If you think you are the man to represent us in this Midwest territory, sell yourself to us, giving complete information in your first correspondence.

Address Ad No. 6999, Feedstuffs Minneapolis 40, Minn.

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FEED MIXER, 1-TON CAPACITY, GUARanteed first-class throughout, 5 H.P. motor drive. Address Ad No. 3479, Feedstuffs, Minneapolis 40, Minn.

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MISCELLANEOUS

FOR SALE — BALED SHAVINGS. BUY from 1 to 10,000 bales, delivered or f.o.b. Juneau, Wis., Carm Grain Co., Juneau, Wisconsin.

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Diameter	Capacity per ft. of height	Maximum height
38 ft.	992 bu.	66 ft.
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Also furnished with 13' x 10' doorways for warehouses. Present location—Lima, Ohio. Standard steel sections erected anywhere at substantial saving.

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General Mills Plans Missouri Hog Meeting

KANSAS CITY—A general meeting for Missouri hog raisers with a slogan, "New Horizons in Swine Production," is being sponored by General Mills, Inc., Minneapolis, at the Coliseum of the Missouri State Fair Grounds, Sedalia, Mo., July 21. The aim of the program is to bring to farmers the latest ideas and information on hog production, General Mills officials said.

The meeting will begin at 9 a.m. and be completed about 4 p.m. R. W. Christianson of the General Mills research farm staff will open the session and introduce Dr. A. Quin of Jensen-Salsbery Laboratories, Kansas City, who will discuss swine diseases and parasitic control. He will be followed by Jack Kroeck, secretary of the Missouri Veterinary Medical Assn., whose topic is "Keys to Success in Swine Production."

The breeding and testing of swine will be discussed by Keith Leavitt of the University of Missouri, and Dr. C. W. Johnson of the General Mills research farm staff will talk about sow management and nutrition. The desirable characteristics of a feeder pig will be outlined by Forrest Knoll, well known to hog raisers in Missouri, and operator of a sale barn at Mexico, Mo.

Dean Wolfe, editor of Hogcasts, publication of the Farm Journal, will describe trends in European operations as he observed them on a recent trip. The talk will be followed with a panel discussion by seven well-known Missouri hog breeders on the program for marketing specific pathogen-free pigs.

Paul Jensen of the General Mills staff, Kansas City, will be moderator of the discussion. Dr. Steve Zobrosky, meats department, University of Missouri, will tell the hog men "what you should be marketing."

The meeting will close with a talk by P. M. Waters, General Mills, Inc., Kansas City, who will describe a program designed by the feed milling firm to help develop swine production in the area.

AVI Changes General Office Location

DARDANELLE, ARK. — General offices of Arkansas Valley Industries, Inc., have been moved to the Crownover Building at 101 Locust St. in Dardanelle.

The second floor of the building has undergone extensive remodeling to provide office facilities for AVI, which has had its headquarters for several years at the company's Arkansas Valley Feed Mill at the north end of the Arkansas River bridge in Dardanelle. Some offices of AVI remain on the north side of the river. The upstairs in the Crownover building contains approximately 3,800 sq. ft. of floor space.

Occuping space in the new offices are Harold Snyder, president; S. D. Mitchell, executive vice president and general manager; William M. Lemley, secretary-treasurer and controller; Paul P. Paladino, general manager of hatcheries; Charles Boyce, sales manager; R. C. Limerick, Jr., general counsel; Olin Hunsucker, director of engineering; Ken Parker, director of public relations; Miss Gretchen Goodier, executive secretary; Huie Hammond, general service manager, and Sherman E. Brown, commercial hen manager; Robert H. Atchison, general manager of processing; Si Womack, merchandising director, and Charles Cline and Bernard Huett, sales representatives.

Remaining at the Arkansas Valley Feed Mill location are AVI's accounting, nutrition, purchasing and milling departments and the offices of Valley Feed Co. and Arkansas Valley Farms, subsidiaries of AVI.

Co-op Mills to Run Farm Bureau Plant

MANHEIM, PA. — Management functions of the Pennsylvania Farm Bureau Cooperative Assn. feed mill here now are the responsibility of Cooperative Mills, Inc.

In announcing this change, George G. Connor, Farm Bureau general manager, said that Farm Bureau, sole owner of the Manheim facility, will retain complete ownership of the mill.

He explained that Farm Bureau has been a part of the Co-op Mills system for more than 20 years and that all the feed requirements for farmer patrons in the western part of the state have been supplied by the Co-op Mills plant near Cincinnati. The Manheim plant serves farmers in the eastern part of the state.

In addition to operating the Cincinnati plant, Co-op Mills also has management contracts to manage and operate similar regional cooperative-owned mills in Delaware, Virginia, North Carolina, Georgia and Ohio, Mr. Connor pointed out.

After supplying a manager for the Manheim facility, Co-op Mills will integrate its management functions at Manheim with those of the total system.

"This action should result in many savings for Farm Bureau in Pennsylvania," said Mr. Connor. "Greater economies in the purchase of ingredients and efficiencies in expediting feed shipments are two new sources for possible savings."

Buys Kansas Elevator

MILWAUKEE — Sale of the grain storage facilities of the McPherson Terminal Storage Co., Inc., McPherson, Kansas, to a group headed by Dr. Jay Goodman, Milwaukee physician, has been announced.

The purchase includes a grain elevator with a 3½ million bushel capacity. The new owners plan to add 1 million bushels in capacity, according to the announcement.

Purchase was made by the Goodman-Nightingale, McPherson Co., Inc. Dr. Goodman is president of the firm. Other officers are Wayne Nightingale, St. Joseph, Mo., vice president and treasurer, and Harold Harris, Milwaukee attorney, secretary. Arthur Blumenthal, Milwaukee attorney, also has an interest in the firm.

Pennsylvania Firm Adds 2nd Feed Line

HARRISBURG, PA.—Pennsylvania Farm Bureau Cooperative Assn. has announced the start of a second line of feed to be marketed "along with its high quality Profitmaker line." The new line will be called "Production."

"We will continue emphasizing the value in our Farm Bureau Profitmaker Feeds," said Duncan Woodward, Farm Bureau feed sales service manager. "But, we know there are many farmers who believe they can do better with feeds like our Production line. So, we are developing this Production line in the interest of farmers.

"Our feed formulation people have come up with feeds that have good texture, are highly palatable and are fortified with vitamins and trace minerals.

"We also have the advantage of closed formula with our Production line," noted Mr. Woodward. "In addition we are making use of urea as a source of protein in the new dairy feeds. Combined with adequate energy, this makes an excellent feed."

At present, there are five feeds in the Production line—16% Production Dairy, 38% Dairy Supplement, 15% Producer All Mash, Egg Producer and 13% Porker.

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IRRADIATED DRY YEAST
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MISSOURI DEANS, DIRECTORS AT MIDWEST MEETING—Pictured here are deans of various colleges at the University of Missouri who met with representatives of the feed industry at a Midwest Feed Manufacturers Assn.-sponsored dinner in Columbia. Midwest directors from Missouri and two Midwest officers are also shown.

From left to right around the first table are: Joe Tully, Ralston Purina Co., St. Louis, association director; Dr. Huber Croft, dean, College of Engineering; Pete Rea, Hales & Hunter, Marshall, director; Dr. Harold Wilcke, Ralston Purina Co.; Dr. Elmer Kiehl, dean, College of Agriculture; Tom Morrow, Morrow Milling Co., Carthage, director, and Dr. Wm. Pfander, animal husbandry department and Missouri representative on the Centennial Nutrition Conference.

Left to right around the second table are: Roy Ammon, The Quaker Oats Co., St. Joseph, director; Dr. Margaret Mangel, dean, School of Home Economics; Larry Alley, president of Midwest; Dr. Thomas A. Brady, dean, extra divisional administration; Lloyd S. Larson, executive vice president of Midwest; Dr. C. B. Ratchford, dean, university extension division; Dr. W. Francis English, dean, arts and sciences; Dr. Irvin F. Coyle, assistant to the president; and Dr. Sam Shirkey, associate dean, College of Agriculture. Not pictured is Prof. Lansford, dean, business and public administration.

Missouri Deans Meet With Midwest Officials

COLUMBIA, MO.—Deans of various colleges at the University of Missouri met with representatives of the feed industry at a Midwest Feed Manufacturers Assn.-sponsored dinner in Columbia.

The gathering was one of a series (others were held at Kansas State University and at Colorado State University) sponsored by Midwest to acquaint all divisions of the state colleges in the association area with the feed industry and its relationship with various branches of learning.

The Missouri deans are shown in an accompanying photo.

Officials presented at the Colorado meeting included Dr. W. E. Morgan, president, Colorado State University; Dr. A. R. Chamberlain, vice president, Colorado State University; Dr. Lowell H. Walts, director of extension and coordinator of agriculture programs; Dr. Avery Bice, associate director, agricultural extension; Dr. Elizabeth D. Gifford, dean, College of Home Economics; Dr. Austin A. Simonds, dean, College of Science and Arts; Dr. Rue Jensen, dean, College of Veterinary Medicine; Dr. Kenneth Oakleaf, extension economist; and Dr. Sherman S. Wheeler, dean, College of Agriculture and director, Agricultural Experiment Station.

Midwest directors from Colorado who attended the meeting included Alf Owens and Bill Covington, who represented Ralph Farr. Lloyd S. Larson, executive vice president of Midwest, was also present.

Meeting at Kansas State with Midwest officials were Dr. James A. McCain, president, Kansas State University: Dr. Glenn H. Beck, dean, School of Agriculture; Dr. C. Peairs Wilson, dean, resident instruction, School of Agriculture; Dr. Robert Schoeff, feed tech extension; Dr. E. E. Lesure, dean, School of Veterinary Medicine; Dr. Doretta Hoffman, dean, School of Home Economics; Dr. Thomas M. Hahn, Jr., dean, School of Arts and Sciences; Dr. M. A. Durland, dean, School of Engineering & Architecture; Dr. John A. Shellenberger, head, flour and feed milling industries; and Prof. Thomas B. Avery, head, poultry department and K-State representative on Centennial Conference.

Association directors at the Kansas meeting were Robert Greenlee, John McKee and Kenneth Winterscheidt. Larry Alley, president of Midwest, and Mr. Larson also attended.

Colorado Study Shows Roundworm Control Through New Drug

FT. COLLINS, COLO.—Numbers of some of the most common roundworms infesting cattle have been reduced from 83 to 100% with a drug known as "Franten" used in tests at Colorado State University here.

These tests substantiate tentative results obtained in earlier studies conducted in 1959 and 1960, according to Colorado State University.

The Colorado State researchers say that Franten (bephenium hydroxynapththoate) has long been used in Great Britain and elsewhere to control internal parasites in sheep and lambs. But, they noted, prior to their studies, little had been done to determine its effectiveness against roundworms in cattle.

Dr. Robert Rubin, associate professor of pathology and bacteriology at CSU, found the drug reduced numbers of the bankrupt or small stomach worm by 82.9% and the medium or brown stomach worm by 92.5%. Numbers of the cooperid worm, found in the small intestine, were reduced by 95.8% and the drug was 100% effective against the nodular worm, found in the large intestine.

That the drug is effective along the entire gastro-intestinal tract is particularly significant, Dr. Rubin noted. Percentage reductions cited occurred within four days after treatment, he said.

The latest CSU test involved 12 animals, of which six were treated and six were not. Three of the treated animals were held off feed for 36 hours prior to treatment and three were permitted to eat. No beneficial effect was derived from fasting three of the six treated animals, however.

Treatment consisted of a single dose of Franten, administered in gelatin capsules with a balling gun. Dosage was figured at the rate of 250 mg. of drug per kg. of body weight. For a typical 500-lb. calf, this means treatment with about two ounces of drug.

FDA Clearance Sought

Food and Drug Administration clearance for the drug's use against roundworms in cattle is now being sought.

So far the drug has been used in only one feedlot trial, it was reported. This study showed treated animals had higher gains than those not treated. Economic aspects of the drug's use will require additional study, since no per-animal cost has been established for the treatment, the CSU researcher said.

Judged on relative effectiveness, the new drug appears to show more promise than the currently-used phenothiazine, Dr. Rubin says. Treated animals also tolerate the new drug very well and it is almost impossible for it to make them ill, he notes.

The CSU studies are being conducted in cooperation with the drug's manufacturer, Burroughs Wellcome & Co., Tuckahoe, N.Y., Dr. Rubin said.

Licenses Granted for Horse Feed Supplement

LEXINGTON, KY.—Sun-Ray Feed Mills, Inc., Lexington, originator of the product Stamm, a feed supplement for horses, has announced the granting of a license to The Pillsbury Co., Orlando, Fla., for the manufacturing and distribution of Stamm in Florida.

Ranch-Way Feed Mills, division of Colorado Milling & Elevator Co., Ft. Collins, will begin production of Stamm in Ontario, Ore., upon the completion of its new mill in Ontario. Ranch-Way will supply Stamm to horsemen in eastern Oregon and the Boise Valley, according to Carl W. Hudgins, executive vice president of Sun-Ray Feed Mills.

Blended Newcastle Vaccine Licensed

BERLIN, MD.—L & M Laboratories, Inc., has received permission to manufacture a blended Newcastle vaccine called "New-Blen" for interstate trade, it has been announced here.

The vaccine will contain one or more strains of Newcastle virus, according to Dr. Roland Winterfield. Dr. Winterfield said, "There is suggestive evidence of more than one type of Newcastle virus."

License to sell the new vaccine was granted by the Agricultural Research Service of the U.S. Department of Agriculture May 16, according to L & M Laboratories.

The firm says that it is the first to "blend various strains of virus which cause a particular disease."

Advantages Cited

Dr. Winterfield, technical director of the firm, says, "We are the first to use more than one strain representing different types of bronchitis to give cross protection." Dr. Stephen B. Hitchner, director of research, said, "There are very definitely three different known types of bronchitis virus, how many more, nobody knows. We know at least two are found in Delmarva."

Dr. Winterfield said that during the spring studies were concentrated on a product called "NB-Blen" which is a blend of Newcastle strains plus bronchitis strains. Marketing is scheduled soon on this product, according to the firm.

The firm also states that eventually the "Blen" product line will include: "Tra-Blen" for 'tracheitis, "Bron-Blen" for bronchitis, "NT-Blen" for Newcastle 'tracheitis and "Pox-Blen" for fowl pox. It was stated, "Vaccines providing broader protection against these four diseases are L & M's objectives."

Names in the News

NBC APPOINTS INDUSTRY RELATIONS DIRECTOR—The appointment of David W. Martin to the post of director of industry relations has been announced by Frank Frazier, National Broiler Council executive vice president, Richmond, Va.

Mr. Martin, who has been with NBC since last February as assistant director of industry relations, succeeds G. R. (Bob) Peterson, who resigned to take a position with a private firm in the poultry industry.

ELECTED TO GENERAL MILLS BOARD — Delbert F. Wright, vice president of administration and employee relations for General Mills, Inc., Minneapolis, has been elected to the company's board of directors. Announced by Gerald S. Kennedy, board chairman, Mr. Wright's election gives the board a membership of 17.

Mr. Wright, who served as comptroller as well as vice president in charge of employee relations from 1959 until June 1, 1961, is now responsible to the president for the company's purchasing, traffic, treasurer's and commercial development departments in addition to employee relations activities.

RANCH-WAY FEED APPOINTMENT — Roy Pearson has been appointed assistant sales manager of the Ranch-Way Feed division of the Colorado Milling & Elevator Co. at Denver, Colo., according to D. L. Chase, general sales manager for Ranch-Way Feeds.

Roy Pearson

Mr. Pearson has been a territory manager for Ranch-Way in northern Colorado since 1958. In his new position, he will assist in the coordination of Ranch-Way Feed sales activities for all territories.

CLIFF STEWART TO JOIN APHF STAFF — Cliff W. Stewart, Minneapolis, will become director of public relations for the American Poultry & Hatchery Federation, Kansas City, July 17. His first assignment will be in connection with the American Poultry Congress & Exposition in Minneapolis July 18-20.

Mr. Stewart has resigned from his post in charge of the Maxi-Lay Queen program for the Pillsbury Co., effective July 15. He was secretary of the Iowa Poultry Improvement Assn. for seven years following the end of World War II. Mr. Stewart was born at Coshocton, Ohio, and received his elementary and high school training there. He entered Iowa State University in 1938, majoring in poultry.

The post Mr. Stewart fills at APHF has been vacant since last February when Richard O'Connell resigned to become a member of the staff of the National Council of Farmer Cooperatives in Washington, D.C.

PILLSBURY PROMOTION — William J. Barnes has been promoted to field manager at Centerville, Iowa, for Pillsbury's feed division, according to L. R. Wright, operations manager of the central-west region for The Pillsbury Co., Minneapolis.

Mr. Barnes joined Pillsbury in 1951. His most recent assignment was as territory manager in eastern South Dakota.

CENTRAL SOYA PROMOTES EDWIN TRIMBLE — Central Soya, Ft. Wayne, Ind., has promoted Edwin E. Trimble to manager of its Chattanooga, Tenn., grain department.

In his new position, Mr. Trimble's responsibilities will include all grain merchandising activities carried on through the Chattanooga plant. He joined Central Soya in 1957. Prior to his new assignment, he was assistant manager of the Chattanooga grain department.

HONEGGERS' PROMOTES 2 — The promotions of Virgil Hulse to controller and Donald Steidinger to assistant treasurer of Honeggers' & Co., Inc., have been announced by E. F. Dickey, president of the Fairbury, Ill., feed manufacturing firm.

Mr. Hulse has served as internal auditor and budget director since joining Honeggers' in 1957. Mr. Steidinger has served as chief accountant and as manager of the accounting department until his elevation to assistant treasurer.

ALLIED MILLS NAMES ROBERT J. McVICKER—Robert J. McVicker has been appointed eastern regional poultry specialist for Allied Mills, Inc., Chicago, it has been announced by C. M. Kessler, eastern regional sales manager.

Mr. McVicker, for the past three years, has been a poultryman in the educational service division with headquarters at Libertyville, Ill. He is now headquartered in the eastern regional office at Camp Hill, Pa., and will work with Wayne Feed salesmen and dealers in the eastern region.

Robert McVicker — James Murphy — Warren Rudolph — Zane Fairchild

USDA APPOINTS CHICAGO HEAD — James Cyril Murphy has been appointed by the U.S. Department of Agriculture to head its Chicago district grain inspection office. Mr. Murphy succeeds English H. Floyd who now heads the USDA's Toledo, Ohio, office.

Mr. Murphy is a recognized authority on grain grading, standardization and inspection. He began his career with the federal inspection service at Chicago in 1930.

WARREN RUDOLPH JOINS BROWN'S LEDBREST—Warren Rudolph has joined Brown's Ledbrest, Inc., Springdale, Ark., as assistant in charge of research.

After receiving his degree in poultry husbandry at the University of Arkansas, Mr. Rudolph worked one year with one of the large breeding farms in the area. He then completed his graduate work in genetics at Oklahoma State University and while there was research assistant and instructor in genetics.

AEROGLIDE NAMES ZANE C. FAIRCHILD—Aeroglide Corp., Raleigh, N.C., has appointed Zane C. Fairchild of Lincoln, Neb., as district representative in the Midwest.

Mr. Fairchild will cover Nebraska, South Dakota and western Iowa. Prior to joining Aeroglide, he was a sales engineer for Notifier Engineering of Lincoln.

DAVID PORTER JOINS TABOR & CO.—David Porter has joined Tabor & Co., grain merchandisers and investment bankers in Decatur, Ill. Prior to joining Tabor, Mr. Porter was with the United Grain Co., Peoria, Ill. He received his B.S. degree from the College of Agriculture at the University of Illinois in 1957.

JOINS INDUSTRIAL MACHINERY CO.—Ellis P. Maas of Elmhurst, Ill., has been appointed north central district representative for Industrial Machinery Co., Inc., Ft. Worth, Texas, according to F. D. Cole, president.

Mr. Maas comes to Industrial Machinery Co. from the Screw Conveyor Corp. of Hammond, Ind., a firm with which he has been associated for the past 21 years.

In his new assignment, Mr. Maas will serve the metropolitan Chicago area, northern Illinois, Wisconsin, Minnesota and the eastern portion of Iowa.

BEMIS APPOINTMENT—Richard B. Windhorst, sales manager of the St. Louis sales division of Bemis Bro. Bag Co., has been appointed product supervisor for textile and waterproof products, with headquarters at the Bemis general sales department in St. Louis.

Richard Windhorst — Norman Uffmann

Norman P. Uffmann, product sales manager of the St. Louis specialty department, succeeds Mr. Windhorst as sales manager of the St. Louis sales division.

WESTERN CONDENSING APPOINTS QUALITY CONTROL MANAGER — Robert E. Parker has been appointed quality control manager at Western Condensing Co., Appleton, Wis. division of Foremost Dairies, to replace Ara O. Call who recently resigned to accept a missionary assignment with the Mormon Church. Mr. Parker has worked in various product control and development capacities including director of the firm's central control laboratory.

Robert Parker

BUCKEYE INCUBATOR CO. ELECTS JAMES MILLER — James R. Miller has been elected an assistant vice president of the Buckeye Incubator Co., Springfield, Ohio, subsidiary of the Buckeye Corp.

Mr. Miller also assumes full responsibility for all Buckeye overseas operations, the firm's board of directors announced. He joined Buckeye in 1956.

Also announced was the appointment of Hugh Karnes as district sales representative for the Buckeye Incubator warehouse in Springdale, Ark.

Formerly with the Blue Ribbon Yeast Co. and Arden Farms as salesman and production manager, respectively, Mr. Karnes will be responsible for sales and service of Buckeye mechanical feeders and poultry equipment in the northwest Arkansas area.

FEED GROUPS AT DEDICATION — **Members of the milling technology advisory council and members of the feed technology advisory committee who were present at the dedication of the new milling technology building at Kansas State University are pictured here.**

Front row, left to right, are: A. J. Sowden, New Era Milling Co., Arkansas City, Ark.; James C. North, Nutrena Mills, Inc., Minneapolis; Dr. John A. Shellenberger, head of the department of feed and flour milling industries, Kansas State University; R. B. Laing, Abilene (Kansas) Flour Milling Co.; Larry Alley, Pay Way Feed Mills, Kansas City, and John Vanier, Western Star Mill Co., Salina, Kansas.

From left to right in the second row are: William Riley, William Kelly Milling Co., Hutchinson, Kansas; James M. Doty, Doty Laboratories, Inc., Kansas City; Owen Wimberly, Okeene (Okla.) Milling Co.; Stewart White, Tri-State Milling Co., Rapid City, S.D.; Ben J. Greer, The Pillsbury Co., Minneapolis; James McNeil, The Pillsbury Co., Minneapolis; W. E. Glennon, American Feed Manufacturers Assn., Chicago, and Richard H. Magerkurth, Air Age Equipment, Inc., Topeka, Kansas.

In the third row, from left to right, are: J. H. Dean; Lloyd Larson, Midwest Feed Manufacturers Assn., Kansas City; Dr. Glenn H. Beck, director of the Kansas State University agricultural experiment station; Maurice Johnson, First National Bank, Kansas City; Richard G. Myers, Rodney Milling Co., Kansas City; John F. Heimovics, Weitz-Hettelsater Engineers, Kansas City; Donald Mennel, Mennel Milling Co., Fostoria, Ohio, and Ellis D. English, Archer-Daniels-Midland Co., Minneapolis.

REES H. DICKSON DIES

JEFFERSONTOWN, KY.—Rees H. Dickson, 68, former president of the Kentucky Public Elevator Co., which was purchased by Early & Daniel Co., Cincinnati, Ohio, in 1943, died recently.

E. C. Fuller Elmer C. Denis

SEMINAR

(Continued from page 1)

Nutrena Mills, Inc., Minneapolis. He urged all feed and allied industry executive sales and marketing personnel to attend the day-and-a-half seminar program at the Morrison Hotel.

"Ten of the best feed industry marketing men and four experts from 'outside' will present an outstanding program that should be of great help to all sales executives," he said. "A new feature, 'buzz sessions,' will permit maximum exchange of ideas and experiences between speakers and seminar registrants. We urge everyone to come and take part."

All industry marketing executives are invited to attend, whether or not their firm is a member of AFMA, Mr. Fuller said.

The first general session, Wednesday morning, Sept. 20, will start with a report from the council's chairman, Robert D. Emmons, Wirthmore Feeds, Waltham, Mass. This will be followed with a review of changes in agribusiness affecting feed marketing, entitled, "Sell or Surrender," by Dean McNeal, chairman of the AFMA board of directors and executive vice president, the Pillsbury Co., Minneapolis.

Three other speeches will complete the session. They are: "Technical Service Needs of Agribusiness Customers" by Elmer C. Denis, manager, marketing research division, Doane Agricultural Service, Inc., St. Louis; "End-Product Marketing Problems of Agribusiness Customers" by Dale Smith, manager, feed department, Western Farmers' Assn., Seattle, Wash., and "Business and Money Management Problems of Agribusiness Customers" by Ben Hauenstein, vice president, Federal Intermediate Credit Bank, St. Paul, Minn.

Personnel Problems

The second general session, Wednesday afternoon, will concentrate upon sales department personnel problems. "The Right Man for the Right Job," an outline of the session theme, will be given by the presiding officer, Paul Cory, sales manager, Moorman Mfg. Co., Quincy, Ill. "Selecting Your Sales Power" will be developed by Robert E. Miller, director of marketing, the Beacon Milling Co., division of Spencer Kellogg & Sons, Inc., Cayuga, N.Y. "Training, Retraining" will be handled by Cliff O. Garrison, manager, field sales training, Moorman Mfg. Co. "Deployment and Management of Manpower" will conclude the session and will be discussed by E. D. Griffin, retired sales vice president, Allied Mills, Inc., Chicago.

"Buzz Sessions" will follow the afternoon speaking session. Six of the Wednesday speakers will conduct individual, informal round-table discussions. Each registrant will have an opportunity to participate in several of these "buzz sessions."

Executive Self-Improvement

The third and last general session will be held Thursday morning, Sept. 21, and will concentrate on the techniques of sales executive self-improvement. "Charting the Course" will be Ed Reynolds, director of marketing, McMillen feed division, Central Soya, Ft. Wayne, Ind. Next will be a discussion of "Development and Preparation," the speaker to be announced. This will be followed by "Sales Leadership in Action" by John R. Sargent, partner in charge of the marketing division of the New York City management consulting firm of Cresap, McCormick and Paget.

The morning session will conclude with an address by J. D. Sykes, vice president, Ralston Purina Co., St. Louis, entitled, "A Public Relations Challenge to Sales Managers." The seminar program will end with a luncheon speaking program.

Two luncheons, three coffee breaks, a cocktail party and the speaking program will be included in a modest registration fee, according to Mr. Fuller.

Additional information on the seminar and registration may be obtained from American Feed Manufacturers Assn., 53 W. Jackson Blvd., Chicago 4, Ill.

EARNINGS

(Continued from page 1)

419 a year earlier. Earnings per share of Class A common stock came to $1.27 as compared to 40¢ last year.

Mr. O'Connor said that gains during the first six months resulted from continued emphasis on product research, and he cited sales of swine feeds during the period which were up 60.5% over a year ago. He attributed this increase to introduction of a new swine feeding program late in 1960.

Sales Training

He also told stockholders that the company's position is further strengthened because of continued emphasis on training increased numbers of sales personnel as well as the fact that the company's area of operation is located in the Corn Belt where the highest concentration of livestock production in the world occurs.

Looking to the future, Mr. O'Connor noted that economists predict an ever-expanding American population will consume 73% more beef, 53% more pork, 58% more poultry, 41% more eggs and 48% more milk and cream in 1975 than are consumed today. "Meat, milk and eggs are the end products of Walnut Grove feeds," he commented.

Walnut Grove operates in an eight-state area in the Corn Belt with manufacturing plants in Atlantic, West Liberty, Independence and Cherokee, Iowa, and Elkhorn, Neb. In addition, the company and its subsidiaries also have five grain processing plants in North Dakota and South Dakota. The firm has 45 company-operated production distribution points, Mr. O'Connor said.

Feed Plant Destroyed

OTHELLO, WASH.—The plant of the Anderson Feed & Produce Co. was destroyed by a $250,000 fire. The fire broke out in the feed mill building and quickly spread through the grain elevator, potato processing plant and office building. Only salvage was the office records, according to reports.

Newell Anderson, owner, said grain and merchandise were covered by insurance and the buildings were partially insured. The greatest loss, he said, would be on the machinery which was mostly new and uninsured.

He also stated that a work crew would begin rebuilding on a 24-hour basis as soon as the debris was cleared, and that processing of potatoes would begin within 30 days.

PANELISTS

(Continued from page 7)

winter to summer. Controlled lighting will bring savings in feed for those using lights, too, he said.

Egg men in the audience wanted to know about the chances of producing pullets that would lay larger size eggs immediately. Dr. Moultrie pointed out that nature has to be taken into consideration and that if such a chicken were produced chances are its production life would be shortened.

Temperature will be controlled somewhere between 65 and 75° F., it was predicted. This will bring a reduction in feed costs and respiratory problems will possibly be largely eliminated in the future, Mr. Hale said. Air changes and blending of air will be determined on local climatic conditions but very definitely many of the human errors of judging local weather conditions will be gone.

Dust Control

Dust control, Mr. Hale said, is probably the most overlooked nuisance for man and bird alike. Diseases are prevalent largely because dust is there as a carrier.

"If dust is removed from houses then concentration of virus is removed also," he said.

Micro-organisms will be controlled better through use of clean litter, humidity and air. It's possible, Mr. Hale said, that samples may be taken of air to determine the presence of organisms. Violet ray will also probably come into use in a few years. "Use of plenty of litter offers opportunity to improve the quality of manure which is becoming an important commercial by-product," he said. "Lots of litter provides better quality fertilizer."

He believes there will be better designs for houses and more agreement on types and systems, a relief from today's hodge-podge of houses based on personal whims and ideas. "The house of the future must be economically sound and free of mechanical failure," Mr. Hale said.

The audience was greatly interested in the cost of the house of tomorrow. Prompted by questioners, Mr. Hale said his guess would be 20-25¢ a foot more than for conventional houses. Urged to elaborate on the over-all cost, he said there would be a savings in construction costs because there would be no windows to run labor costs up. He said houses built in Arkansas run 90¢ a foot, which does not include the 20-25¢ extra for the refinements he predicted would be in use in a few years.

How About Markets?

The crystal gazers were asked where would all the broilers and eggs be sold in the future, with production soaring as it is today. The processing consultant, Charles Owen, ventured the opinion the markets would be found in in-plant feeding institutions, by-product usage, portion control development for restaurants as well as vending machines that sell prepared food. The institutional field alone sells 24 million meals annually and this is a vast untapped market. Meanwhile, though, the industry via the processors needs to conduct more research for new recipes, new products and new sales outlets.

Processors thinking of expanding into processed foods should go at it wholeheartedly and not as a sideline, Mr. Owen believes. Possibly such operations should be separate from processing plants of today.

"Plan your equipment with diversity in mind and quality control. Remember four out of five new products are refused by housewives who are the final judges of a product," he said.

Production Location

Location of egg farms near markets pays a premium and this condition will continue in the future, it was indicated by Dr. Huttar.

"Studies show that egg movement from farm to dealer to warehouse to retailer costs 1¢ doz. in breakage alone, with an over-all cost of 2½¢ doz. for transportation and breakage," he said. "This amounts to $4 ton in feed alone."

His prediction for five years from now was that there will be more egg sheds nearer markets—within 100 miles. And, there definitely will be more on-the-farm processing because an egg doesn't require technical processing.

A stronger trend toward central sales organizations is apparent. This is because the farmer is an amateur at selling and cannot compete with the chain store buyer. Central selling and central bargaining go together.

Another reason for producing near markets is the trend toward retail outlets wanting deliveries direct. Dr. Huttar said supermarkets often misgauge their needs, finding on Friday that they have underbought and want immediate deliveries to the stores affected.

Dr. Huttar also braved this prediction: The future will see more dried, frozen eggs in use in one form or another in the home. This will come from processed foods, such as Mr. Owen predicted. An example is frozen French toast, which is already showing in stores.

True or False?

How many of the predictions will come true? Just don't sell the crystal gazers short, warned Frank G. Wollney, moderator and field service director, Institute of American Poultry Industries.

For example, in 1949 a U.S. Department of Agriculture spokesman made the prediction the broiler industry could expect a production of 572 million broilers in the U.S.

"Some people thought he was crazy. But what happened? Why in 1960, Alabama and Georgia alone produced just about what he predicted for the U.S. He was two thirds wrong!" Mr. Wollney said.

MISSISSIPPI

(Continued from page 6)

efficient feed conversion and low mortality of birds. In addition, each family will be allowed to eat all the chicken they want.

Another thing planned is that all houses will be insulated. By using new type insulation material for the walls, the owners hope to maintain an even 60° temperature in the housing during cold weather. Heaters will be regulated by thermostat control, and the houses will be cooled during the hot summer months by ventilation fans. There will also be some provision for regulating the humidity of the air.

"This is not entirely a new thing," said Mr. Bryant. "Last winter we insulated some houses and found that diseases were practically eliminated. Another advantage is that it will save on heating costs. With the kind of open houses that were built a few years ago, it is almost impossible to get enough heat during the coldest weather."

To Expand Facilities

The extra 2 million broilers on feed may require the expansion of other facilities. At present the processing plant is handling about 180,000 birds a week, and the feed mill can turn out about 100 tons of feed in eight hours.

The company is using a lighter bird than some processing plants in the area. Birds are usually hauled in when they reach a weight of 3¼ lb.

Details for the companies have not been worked out entirely yet, but Mr. Bryant says the expansion plans will continue, regardless of the price situation. He doesn't look for much price improvement for quite some time yet, and particularly is apprehensive about prices this coming winter. He says there has been very little cutback among producers in Mississippi, that most houses are full and the hatcheries are mostly in full production.

"It's very competitive," he said, "and no one knows just what companies will be left in the business a year or so ahead. We do know we must get 100% efficiency by eliminating all the weak links and by going into big production."

The FEED MARKET

PRICE QUOTATIONS, MARKET TRENDS
OF PRINCIPAL INGREDIENTS

NOTE: Quotations on feed ingredients shown in these and adjoining columns are wholesale prices, per ton, bulk, for prompt delivery, unless otherwise noted. They are the latest quotations available from Feedstuffs correspondents and are not necessarily those in effect on date of publication. The prices represent fair average trading values and do not necessarily represent extreme low or high levels at which individual sales might have occurred. A descriptive summary of supply and demand factors prevalent in the feed market appears on page 2.

ALFALFA MEAL

Ft. Worth: Demand good for dehydrated, slow for suncured; trend steady; supply sufficient; sacked: dehydrated, 17%, 100,000 A $47@48, truck or rail, up $1; suncured, 13%, ¼-in. grind, No. 1 $42, truck, unchanged.

Chicago: Demand fair; trend steady to $1 up; supply moderate; dehydrated, 17% protein, 100,000 units vitamin A $43.

Boston: Demand good; trend firm; supply adequate; dehydrated, 17% $53, up $2; suncured, 13% $45, unchanged.

St. Louis: Demand good; trend firm; supply ample; dehydrated, 17% protein, 100,000 units of vitamin A, pellets $40.50, unchanged.

Minneapolis: Demand good; supplies plentiful; price steady; 17% dehydrated, 100,000 units vitamin A reground pellets $44, oiled reground $45.

Seattle: Demand fair; trend easy; supply ample; suncured, 15% protein $38, Seattle, unchanged (new crop); dehydrated, 150,000 A units $67, Seattle, unchanged (new crop).

Buffalo: Demand and supply fair; trend higher; $56.10, sacked, Boston, up $1.

Kansas City: Demand fair; trend steady; supply adequate; 17% dehydrated alfalfa, 100,000 A pellets $38@40, reground pellets $39@41; 18% dehydrated alfalfa, 125,000 A pellets $40@43, reground pellets $41@44; 20% dehydrated alfalfa, 150,000 A pellets $47@48, reground pellets $48@49, unchanged.

Cincinnati: Demand poor; trend steady; supply adequate; 17% dehydrated, 100,000 vitamin A $48, unchanged.

Los Angeles: Demand for dehydrated steady, suncured moderate; trend steady; supply for dehydrated limited, suncured adequate; dehydrated meal, 17% protein, 100,000 A $50@51; dehydrated pellet meal, 17% protein, 100,000 A $52@54; suncured meal, 15% protein $42@43; suncured crumbles, 15% protein $44@45; all unchanged.

Memphis: Demand good; trend steady; supply adequate; dehydrated, 17% protein, guaranteed 100,000 units vitamin A $44.50, down $1.50; reground pellets $44.60, unchanged.

Portland: Demand fair; trend steady; supply adequate; 15% suncured $41; 20% dehydrated pellet meal $70; both sacked.

ANIMAL FAT (STABILIZED)

Ft. Worth: Demand good; trend higher; supply moderate; prime tallow, tank cars 6¼¢ lb., drums 7¾¢ lb., f.o.b. north Texas packing plants with returnable drums, up ¼¢.

Boston: Demand slow; trend easy; supply ample; tallow 6¼¢ lb., off ⅛¢; yellow grease 5¾¢ lb., off ⅛¢.

Chicago: Demand better; trend up ¼¢; supply fair; bleachable fancy tallow $6.50 cwt., yellow grease $5.50 cwt., tank truck or carload.

San Francisco: Demand fair; supply ample; trend down; bleachable fancy 6¾¢ lb., up ⅛¢; yellow grease 6¼¢ lb., up ⅛¢.

St. Louis: Demand fair; trend firm; supply ample; yellow grease 5¾¢ lb., delivered tank truck or cars, unchanged.

St. Paul: Demand good; supplies ample; price advanced ⅛¢ to 6¼¢ lb., f.o.b. producer's plant.

Memphis: Demand slow; trend steady; supply adequate; yellow grease 6¼¢ lb., up ¼¢; prime tallow 6⅜¢ lb., up ⅛¢.

Los Angeles: Demand and supply limited; trend steady; 6¼¢ lb., unchanged.

Atlanta: Demand fair; trend steady; supply good; 6¢ lb., f.o.b. Alabama and Georgia processing plants.

BARLEY FEED

Baltimore: Demand fair; trend firm; supply ample; $44.50, sacked.

Chicago: Demand quiet; trend firm; supply fair; $34, sacked.

San Francisco: Demand fair; supply ample; trend steady; rolled $61, ground $60, both unchanged.

Boston: Demand fair; trend steady; supply light; $45, unchanged.

Seattle: Demand fair; trend firm; supply limited; $46, truck lots, unchanged.

Los Angeles: Demand fair; trend firmer; supply adequate; $2.55 cwt., up 5¢.

BLOOD MEAL

Chicago: Demand moderate; trend steady; supply fair; 80% protein $130, sacked.

San Francisco: Demand and supply fair; trend steady; $6.50 a unit of ammonia, sacked.

Los Angeles: Demand fair; trend steady; supply tight; $5.50 a unit of ammonia, sacked.

BONE MEAL (STEAMED)

Ft. Worth: Demand fair; trend steady; supply sufficient; domestic $100, sacked, f.o.b. Ft. Worth, unchanged.

Chicago: Demand and supply fair; trend unchanged; $95, sacked.

San Francisco: Demand good; supply ample; trend steady; $75, unchanged.

Boston: Demand and supply steady; trend steady; $105, unchanged.

Seattle: Demand fair; trend steady; supply good; $92, f.o.b. car Seattle, sacked, unchanged.

Buffalo: Demand good; trend steady; supply fair; $105, sacked, f.o.b. Buffalo, unchanged.

Cincinnati: Demand good; trend strong; supply fair; $100, sacked, Cincinnati, up $5.

Los Angeles: Demand good; trend steady; supply ample; imported $80, 20 ton lots, sacked, unchanged.

BREWERS DRIED GRAINS

Ft. Worth: Demand slow; trend steady; supply sufficient; 26% protein $52.50, sacked, unchanged.

Chicago: Demand slow; trend lower, off $2@2.50; supply ample; 26% protein $31.50 @32.50.

Boston: Demand fair; trend irregular; supply adequate; 26% $46, off $1.

San Francisco: Demand fair; supply ample; trend steady; $51, sacked, unchanged.

St. Louis: Demand fair; trend easy; supply ample; $35.50, down $1.

Buffalo: Demand fair; trend lower; supply good; $45, Boston, off $1.50.

Cincinnati: Demand fair; trend steady; supply limited; $44.50, unchanged.

Los Angeles: Demand good; trend steady; supply adequate; $50, unchanged.

BREWERS DRIED YEAST

St. Louis: Demand fair; trend firm; supply ample; 9½@10¢ lb., carlots, sacked; 10½¢ lb., ton lots; 11½¢ lb., less than ton lots.

Chicago: Demand fair; trend steady; supply ample; 9½@10¢ lb., carlots, sacked; 9¾@12½¢ lb., l.c.l.

Milwaukee: Demand fair; trend steady; supply ample; 10½@12½¢ lb., ton lots, sacked.

San Francisco: Demand fair; supply good; trend steady; 10¢ lb., sacked, unchanged.

Ft. Worth: Demand slow; trend steady; supply sufficient; 11½¢ lb., ton lots, sacked, unchanged.

Seattle: Demand slow; trend steady; supply ample; $12 cwt., sacked.

Buffalo: Demand fair; trend steady; supply adequate; $8.75 cwt., unchanged.

Cincinnati: 9@10¢ lb., sacked, unchanged.

Los Angeles: Demand good; trend steady; supply limited; 10¢ lb., 5 ton lots, sacked; 11¢ lb., 1 ton lots, sacked; 12¢ lb., less than ton lots, sacked; all unchanged.

CALCIUM CARBONATE

Ft. Worth: Demand normal; trend steady; supply sufficient; $4.50@5, f.o.b. north Texas, unchanged.

Chicago: Demand fair; trend steady; supply ample; fine grind, plain, 100 lb. bags $9.54; bulk, in hopper cars $7.54; bulk in boxcars $8.04; granular grind $1 premium.

Minneapolis: Fine grind, 50 lb. bags $13.75; 100 lb. bags $13; bulk, boxcar $11.50; bulk, hopper $11; coarse grind $1 premium, delivered Minneapolis.

Seattle: Demand and trend steady; supply good; $14, ex-warehouse, sacked.

Cincinnati: Demand fair; trend steady; supply adequate; $7@7.50 cwt., unchanged.

Los Angeles: Demand fair; trend steady; supply adequate; flour $9.85, 20 ton cars; meal $10.20, 20 ton cars; both sacked.

COCONUT OIL MEAL

San Francisco: Demand fair; supply ample; trend steady; solvent $52, unchanged.

Seattle: Demand fair; trend firm; supply tight; solvent type $70, f.o.b. car Seattle, sacked, unchanged.

Los Angeles: Demand moderate; trend steady; supply adequate; copra cake, July $65, unchanged.

Portland: Demand slow; trend steady; supply adequate; 20% solvent $63.20.

CONDENSED FISH SOLUBLES

Ft. Worth: Demand fair; supply unobtainable for nearby position; tank car, West Coast production, nominal $4.41 cwt.; dried fish solubles, nominal $151.60, unchanged.

Boston: Demand and supply steady; trend steady; $45, unchanged.

Los Angeles: Demand good; trend steady; supply limited; 3⅛@3½¢ lb., unchanged.

CORN GLUTEN FEED AND MEAL

(All quotations for all cities are bulk basis, sacked basis $6 more)

Minneapolis: Feed $39.70, meal $78.70.
Atlanta: Feed $43.10, meal $82.10.
Birmingham: Feed $40.90, meal $79.90.
Boston: Feed $44.60, meal $83.60.
Chicago: Feed $33, meal $72.
Cleveland: Feed $41, meal $80.
Denver: Feed $43.30, meal $82.30.
Ft. Worth: Feed $43.80, meal $80.80.
Indianapolis: Feed $38.25, meal $77.25.
Kansas City: Feed $32 meal $72.
Louisville: Feed $39.55, meal $78.55.
New York: Feed $44.20, meal $83.20.
New Orleans: Feed $43, meal $82.
Norfolk: Feed $43.60, meal $82.60.
Philadelphia: Feed $43.80, meal $82.80.
St. Louis: Feed $33, meal $72.

CORN OIL MEAL

Seattle: Demand good; trend steady; supply ample; $54.50, up 50¢.

Cincinnati: Demand fair; trend lower; supply adequate; $40, down $2.

COTTONSEED OIL MEAL

San Francisco: Demand fair; supply ample; trend firm; 41% $63.20, down $1; 44% $67.50, down $1.

Ft. Worth: Demand fair; trend strong; supply sufficient on meal, scarce on hulls; 41% old process $57@58, f.o.b. mills Ft. Worth, up $1; solvent $56.40, July-August; pellets $2 additional; hulls $19, up $1@2.

Chicago: Demand fair; trend up 50¢; supply moderate; hydraulic $63, Memphis basis.

St. Louis: Demand slow; trend firm; supply limited; 41% solvent process $62.50, Memphis, 50¢ higher.

Seattle: Demand fair; trend easy; supply ample; 41% expeller $69, f.o.b. car Seattle, down $2.

Buffalo: Demand poor; trend steady to higher; supply fair to poor; $83.90, sacked, Boston, up 60¢.

Kansas City: Demand fair; trend steady; supply ample; 41% solvent process $61.80, unchanged; 41% expeller $62.50@63, up 50¢.

Cincinnati: Demand poor; trend steady; supply adequate; $69.50 in 40-ton lots, up $1.

Atlanta: Demand good; trend steady; supply fair; 41% $67, delivered.

Los Angeles: Demand moderate; trend steady; supply adequate; $60, unchanged.

Memphis: Demand fair; trend steady; supply light; prime 41% protein old process $63, up $1; new process 41% protein, none available.

Portland: Demand slow; trend about steady; supply adequate; 41% solvent $70.20.

CURACAO PHOSPHATE

New York: Minimum 14% phosphorus $13.50 sacked, $10.50 bulk, f.o.b. New Orleans, Jacksonville and Philadelphia.

DEFLUORINATED PHOSPHATE

Coronet, Fla.: Minimum phosphorus 18%, minimum calcium 31%, maximum calcium 34%, maximum fluorine .18%; guaranteed uniform analysis; carload $61.25, sacked, 100 lb. multiwall bags, bulk $58.25; truck load $62, sacked, in 100 lb. multiwall bags, bulk $59, f.o.b. Coronet, Fla.

Tupelo, Miss.: Minimum phosphorus 14%, minimum calcium 28%, maximum fluorine .14% $52, f.o.b. Tupelo in 100 lb. multiwall bags, $49 bulk.

Wales, Tenn.: Minimum phosphorus 18%, minimum calcium 33%, maximum 36%, maximum fluorine .18% $66 (or $3.67 per unit of P), f.o.b. Wales in 100 lb. multiwall bags, $3 less in bulk.

Butte, Mont.: Minimum phosphorus 18%, minimum calcium 32%, maximum calcium 36%, maximum fluorine .18% $81 (or $4.50 per unit of P), f.o.b. Butte, 100 lb. multiwall bags; bulk $78; truck lots of less than 10 tons $10 more, bagged or bulk.

Houston: Minimum phosphorus 19%, minimum calcium 32%, maximum calcium 35%, maximum fluorine .19% $69.35 net ton, f.o.b. Houston, 100 lb. multiwall bags; $66.35 bulk ($3.65 per unit of P).

Ft. Worth: Demand fair; trend steady; supply sufficient; minimum 18¼% phosphorus, maximum 31% calcium, maximum .18% fluorine $76.65, sacked, unchanged.

Cincinnati: 18% phosphorus, carlots $74.30, ton lots $83.30; 14% phosphorus, carlots $62.50, ton lots $72.50, f.o.b. Cincinnati, unchanged.

DICALCIUM PHOSPHATE

Trenton, Mich.: 18½% P $83, bulk, boxcar/hopper car; $86, bagged, in less than carload lots; 21% P, $94.05, bulk, boxcar/hopper car; $97.65, bagged, in carloads or truck loads; $107.65, bagged, less than carload; all prices f.o.b. Trenton, freight equalized with nearest producing point.

Chicago: Bulk, carlots and truck loads, 18½% phosphate $78 and 21% phosphate $89; packed in 100 lb. papers, 10 tons or more, 18½% phosphate $81 and 21% $92; lesser quantities, 18½% phosphate $91 and 21% $102; above prices per ton, f.o.b. Chicago Heights, Ill., or Nashville, Tenn.

Bonnie, Fla.: Minimum phosphorus 18½%, granular, $81 (or $4.38 unit of P), freight equalized from nearest producing point, carload basis; bulk carloads $3 less; in truck loads of less than 10 tons, $10 more. Western slope prices, for delivery at established railroad stations and by truck at regular feed mixing plants: California, Arizona, Nevada and Utah, $99.90; Washington, Oregon, Montana and Idaho, $107.15; bulk carloads $3 less; truck loads less than 10 tons, $10 more.

Columbia, Tenn.: Minimum phosphorus 18.5%, minimum calcium 24% $81, f.o.b. Columbia, in 100 lb. multiwall bags; freight equalized with nearest producing point, carload basis; bulk $3 ton less.

Texas City, Texas: Minimum phosphorus 18.5%, minimum calcium 20%, maximum calcium 23%, maximum fluorine .12%; carload and truck load $75.50, sacked, in 100 lb. multiwall bags, bulk $72.50, f.o.b. Texas City.

Ft. Worth: Demand fair; trend steady; supply adequate; $81.50, sacked, unchanged.

Seattle: Demand good; trend steady; supply limited; $91, ex-dock, Seattle, sacked, unchanged.

Buffalo: Demand fair to good; trend steady; supply adequate; $82.93, sacked, f.o.b. Buffalo, unchanged.

Cincinnati: 18½% phosphorus $88.80, bagged in carloads; $98.70 in ton lots, f.o.b. Cincinnati; $81, f.o.b. production points, unchanged.

Los Angeles: Demand slow; trend steady; supply adequate; 18½% phosphorus $95.10, sacked.

DISTILLERS DRIED GRAINS

Boston: Demand spotty; trend unsettled; supply irregular; $66, off $1@2.

San Francisco: Demand fair; supply ample; trend steady; solubles $79, sacked, unchanged.

Seattle: Demand good; trend firm; none available; $71, delivered truck lots, sacked, unchanged.

Buffalo: Demand fair; trend steady; supply fair to poor; $68, Boston, unchanged.

Louisville: Demand good; trend strong; supply scarce; prices up $1, due to lack of production; dark bourbon grains, sacked and packed, f.o.b. Louisville $54@55; light $1@2 less; solubles steady at $73

Cincinnati: Demand poor; trend steady; supply tight; $63@65, unchanged.

DRIED BEET PULP

San Francisco: Demand good; supply fair; trend steady; $44.

Boston: Demand slow; trend unsettled; supply spotty; $68.50, sacked.

Seattle: Demand fair; trend steady; supply ample; $48, delivered carlots, sacked, unchanged.

Buffalo: $70, sacked, nominal, Boston.

Los Angeles: Demand moderate; trend steady; supply ample; July $47.10, unchanged.

Atlanta: Demand fair; trend steady; supply short; $63.50, sacked, delivered.

Portland: Demand slow; supply adequate; trend unchanged; $47.58, sacked.

DRIED BUTTERMILK

Boston: Demand and supply steady; trend steady; 14¢ lb., unchanged.

Chicago: Demand slow; trend steady; supply ample; medium acid $9.75@10.25 cwt., sweet cream $9.75@10.25 cwt., both sacked.

San Francisco: Demand fair; supply ample; trend steady; 13½¢ lb., sacked, unchanged.

Buffalo: Demand fair; trend steady; supply adequate; $10.60 cwt., unchanged.

Los Angeles: Demand fair; trend steady; supply light; 13½@14¢ lb., sacked, unchanged.

DRIED CITRUS PULP

San Francisco: Demand and supply fair; trend steady; meal $48, sacked, unchanged.

Boston: Demand slow; trend steady; supply ample; $37.50, f.o.b. Florida, unchanged.

Buffalo: Demand and supply fair; trend steady; $37.50, f.o.b. Florida points, unchanged.

Los Angeles: Demand moderate; trend steady; supply limited; orange pulp $43, lemon pulp $40@41, both unchanged.

Atlanta: Demand fair; trend steady; supply good; pulp $37.50, sacked; meal $32.50, sacked; both f.o.b. Florida processing plants.

DRIED SKIM MILK

Chicago: Demand moderate; trend steady; supply adequate; $10.85@11.35 cwt., sacked.

Ft. Worth: Demand slow; trend steady; supply moderate; $15.65 cwt., sacked, unchanged.

San Francisco: Demand and supply fair; trend steady; 14½¢ lb., sacked, unchanged.

Boston: Demand good; trend firm; supply tight; 13½¢ lb., unchanged.

Minneapolis: Price holds firm at $12 cwt.

Buffalo: Demand and supply fair; trend steady; spray $11.45 cwt., unchanged.

Cincinnati: Demand fair; trend steady; supply adequate; 12@13¢ lb., sacked, unchanged.

Los Angeles: Demand slow; trend steady; supply adequate; 14¢ lb., less than ton lots, sacked; 13¾¢ lb., ton lots, sacked; both unchanged.

DRIED WHEY

Ft. Worth: Demand fair; trend steady; supply adequate; standard $4.75, sacked, truck or rail, delivered Ft. Worth; small lots $5.25, f.o.b. warehouse Ft. Worth, unchanged.

Chicago: Demand quiet; trend firm; supply ample; $4.75@5 cwt., sacked.

Boston: Demand and supply steady; trend firm; 5¾¢ lb., unchanged.

San Francisco: Demand and trend steady; supply good; $5.25 cwt., sacked, unchanged.

Minneapolis: Demand remains steady; supplies still limited; price steady at $4.75, f.o.b. shipping points.

Seattle: Demand steady; trend easy; supply good; $5.85 cwt., ex-warehouse, l.c.l., unchanged.

Kansas City: Demand fair; trend steady; supply ample; $4.75 cwt., sacked, unchanged.

Cincinnati: Demand fair; trend steady; supply adequate; $5.75 cwt., sacked, unchanged.

Los Angeles: Demand fair; trend steady; supply adequate; $5.18 cwt., carloads, sacked; $5.35 cwt., l.c.l., sacked; both unchanged.

FEATHER MEAL (HYDROLYZED)

Boston: Demand active; supply tight; trend strong; $90, sacked, unchanged.

Ft. Worth: Demand good; trend steady; supply scarce; 85% protein $89@92.50, sacked, delivered Ft. Worth.

San Francisco: Demand and supply fair; trend firm; $95, sacked, unchanged.

Los Angeles: Supply nominal; $1 a unit of protein, sacked, unchanged.

Atlanta: Demand good; trend strong; supply short; $85, f.o.b. Alabama and Georgia production points.

FISH MEAL

Ft. Worth: Demand good; trend steady; supply light for immediate; sacked: 65% protein Peruvian $124, July, unchanged; new crop menhaden $127.50, July, unchanged.

Chicago: Demand improved; trend strong; supply fair; menhaden, East Coast or Gulf $115@120; scrap $111@117; Canadian herring meal $1.80 a unit of protein.

Boston: Demand steady; trend firm; supply light; 57% $110, unchanged; 60% $114 @116, unchanged.

San Francisco: Demand fair; supply ample; trend firm; $1.85 a unit of protein, unchanged.

Seattle: Demand fair; trend firm; supply limited; $1.85 a unit protein, f.o.b. truck Vancouver, B.C. (Canadian production), unchanged.

Minneapolis: Demand good; supplies still limited to scarce; price of West Coast blended steady at $142; price of Canadian herring steady at $1.77 a unit, f.o.b. West Coast, subject to production.

Buffalo: Demand fair; trend very firm; supply scarce; 60% protein menhaden $125, f.o.b. Buffalo, unchanged.

Cincinnati: Demand fair; trend steady; supply adequate; $108.10, unchanged.

Atlanta: Demand fair; trend steady; supply very limited; 60% menhaden $115, sacked, f.o.b. Atlantic and Gulf ports.

Los Angeles: Demand and trend steady;

(Turn to QUOTES, page 90)

Major Markets Roundup

Soybean Oil Meal Stages $4 to $5 Advance

Soybean oil meal bounced back $4 to $5 in most of the ingredient markets across the nation this week. Some attributed the advance to the bull turn taken by flax and its effect on linseed oil meal.

Linseed oil meal and cottonseed oil meal generally advanced. Other protein ingredients also moved higher in trading during the week.

The bullish turn in the market came after drouth reports from North Dakota, South Dakota and Minnesota as well as the Canadian prairie provinces. Flax, oats and barley product prices were affected last week.

East

BOSTON: The local millfeed market moved in a narrow range last week as buyers were not too aggressive in seeking supplies while potential sellers were not inclined to force sales. Most of the transactions were confined to spot or nearby requirements.

Dairy, cattle and broiler formula feed sales were still on the decline while turkey and hog feed sales were on a par with recent weeks. Brewers and distillers grains were inclined to sag. Soybean meal recorded a sharp recovery from the low point by rallying $2.50 to $4.

BUFFALO: Soybean oil meal turned around and climbed $5.50 in a mostly higher ingredient market.

A $6 jump in linseed oil meal on poor crop prospects also was a feature as weather conditions continued to affect some crops. Cottonseed oil meal edged up 60¢ even though it was in poor demand. Meat scraps rose $5 on extremely light supplies.

Brewers' grains weakened again and were off $1.50, but distillers' grains held steady. Hominy feed gave up 50¢ and alfalfa meal rose $1.

Bran and middlings held near their seasonal lows as buyers bought spasmodically on a replacement basis only. Even though prices look low, capacity flour mill running time and low-level mixer business restricted price movements. Bran was off 50¢, middlings were up 50¢ and red dog was down 50¢.

CINCINNATI: With the customary July inventory taking now completed, manufacturers and distributors of ingredients are beginning their seasonal inventory buildup to be ready for the anticipated increase in business after mid-summer harvesting activities.

Despite the slow local business, prices for eight ingredients advanced nominally. Those advancing were: Soybean oil meal, $4.50; steamed bone meal, $5; 50% meat and bone scraps, $2.50; unground grain screenings, $1; tankage, $2.50; cottonseed oil meal, $1; linseed oil meal, $1.50, and middlings, $1.

On the down side were corn oil meal, $2; hominy feed, $1.50, and millfeed-bran, $1.

South

ATLANTA: Very little cottonseed meal is being offered in the Southeast. For the first time in three years cottonseed meal for shipment out of South Texas is making the southeastern market from Miami as far north as Pennsylvania under the Mississippi Valley asking prices.

Soybean meal continues to go up a little each day while more processors are completing their crushing operations for this season.

Cottonseed hulls are moving very slowly and the ones who withdrew from the market during the early spring believing that prices would advance during the summer months are finding that this did not materialize and are offering hulls at reduced prices.

The recent advance in the price of citrus pulp has slowed down the movement considerably as dealers and manufacturers who built up their inventories at lower prices are moving their on-hand stocks before restocking.

LOS ANGELES: The barley harvest in the Imperial Valley has been completed and much of the barley has been stored in the local area. Next week milo harvesting will begin in this territory and early purchases indicate prices ranging 15-20¢ below Texas non-transit milo.

Good quality barley and excellent yields have been reported from the lower San Joaquin Valley where harvesting has passed its peak.

Milo prices decreased 5¢ cwt.

MEMPHIS: Ingredient prices were irregular on the Memphis market. Business was generally slow.

Slack trade prevailed during the holiday season on animal proteins and fats, with prices mixed. It is believed that most users have fair stocks, but will be back in the market soon.

Local alfalfa mills have had some difficulty maintaining full running time due to recent dry weather.

With the upturn in old crop soybeans, soybean oil meal prices improved. However, demand was still on the slow side. Still, business done was for nearby shipment. Even though the demand is considered poor, a little more interest developed than indicated a week earlier.

Millfeed was weak, although feed mixers' buyers were purchasing fair quantities.

Oilseed meal futures moved higher on the Memphis Board of Trade the past week.

Unrestricted soybean oil meal closed July 5 $1 to $4.50 per ton higher than June 28 and bulk solvent cottonseed oil meal was unchanged to $1 higher.

Prices of unrestricted soybean oil meal responded to higher old crop soybean futures. Bulk solvent cottonseed oil meal was influenced by tight supplies.

Trading volume for the week, cut short by the Independence Day holiday, amounted to 5,500 tons of unrestricted soybean oil meal and 600 tons of bulk solvent cottonseed oil meal.

Midwest

CHICAGO: July soybean oil meal closed July 5 at just a shade over $62 per ton, up $4.50 from the low of June 29.

This was brought about by the bull turn taken by flax and its more or less inevitable impact on linseed oil meal.

Users of soybean oil meal should be encouraged by the Galvin crop report of July 5 on soybeans. It indicates a 2½ million acre increase in the crop for this season. The private crop expert spoke of a probable 615 million bushel bean crop with growing conditions rated six points better than last year and two points over the 10 year average.

ST. LOUIS: A sharp advance in soybean meal and a decline in millfeed prices to the lowest level in six months stood out in the feed ingredient market last week. Volume of trading showed no improvement as buyers continued to follow a cautious inventory policy.

Soybean meal closed with a $5 advance following an upturn of an equal amount in the July future. The jump was sparked by dry weather conditions in Canada and the feeling that this country may export large quantities of meal to that country. Brokers said few feed manufacturers cared to follow the increase and no more trading was going on than usual.

On the other hand, with millfeeds on the bargain counter, mixers were keeping well filled up at spot prices and showed an interest in taking on future needs. But forward shipment offers were hard to uncover as mills were uncertain on how they stood and hoped that better prices would be forthcoming.

MINNEAPOLIS-ST. PAUL: Soybean oil meal advanced $2.50 to $3 and linseed oil meal was up $3 in a market which saw activity only in the protein ingredient category.

A $2 to $4 advance was marked up by tankage and meat and bone meal was up $2. Animal fat gained back another ⅛¢ of its recent loss and is now selling at 6¼¢ lb.

There were no further changes in ingredients which reacted last week

Farm Commodity-Feed Price Ratios

	U.S.	New Eng.	Mid-Atl.	East North Cent.	West North Cent.	South Atl.	East South Cent.	West South Cent.	Mount.	Pac.
CHICKEN-FEED—										
Farm Chickens:										
June, 1961	3.1	3.0	4.2	3.2	2.5	3.3	3.3	3.1	3.3	2.3
May, 1961	3.3	3.5	4.3	3.4	2.6	3.3	3.5	3.3	3.4	2.4
June, 1960	3.8	4.5	4.6	4.0	3.1	4.0	3.6	3.5	3.3	2.9
Average (1950-59)	5.0									
Average (June, 1950-59)	5.0									
Broilers:										
June, 1961	2.7	2.9	3.6	3.0	3.1	2.6	2.5	2.8	3.4	2.8
May, 1961	3.0	3.4	4.1	3.2	3.4	2.9	2.9	3.1	3.5	3.2
June, 1960	3.8	3.9	4.3	3.9	4.0	3.7	3.6	3.9	3.9	4.0
TURKEY-FEED—										
June, 1961	6.0	7.2	7.9	6.3	7.0	5.7	6.2	6.1	6.0	5.3
May, 1961	6.3	7.3	8.2	6.6	7.2	6.2	6.5	6.2	6.3	5.6
June, 1960	7.1	7.8	8.6	6.9	8.3	6.4	6.8	6.8	6.5	6.6
Average (1950-59)	8.0									
Average (June, 1950-59)	7.7									
EGG-FEED—										
June, 1961	9.1	10.0	9.6	8.8	9.1	9.5	10.3	9.5	9.5	7.5
May, 1961	9.4	10.5	9.6	9.1	9.7	9.5	10.5	9.8	9.6	8.3
June, 1960	9.3	11.5	9.9	8.9	8.8	10.3	10.1	9.4	9.3	7.9
Average (1950-59)	10.7									
Average (June, 1950-59)	9.4									

	U.S.	North Atl.	East North Cent.	West North Cent.	South Atl.	South Cent.	West
MILK-FEED—							
June, 1961	1.32	1.17	1.33	1.47	1.56	1.40	1.30
May, 1961	1.34	1.19	1.36	1.49	1.55	1.42	1.30
June, 1960	1.30	1.20	1.28	1.41	1.55	1.37	1.27
Average (1950-59)	1.31						
Average (June, 1950-59)	1.16						
BUTTERFAT-FEED—							
June, 1961	25.1	...	20.7	26.7	...	17.1	19.0
May, 1961	25.2	...	20.7	26.8	...	17.1	19.2
June, 1960	24.1	...	20.3	26.2	...	16.2	18.5
Average (1950-59)	22.4						
Average (June, 1950-59)	21.7						

HOG-CORN—	U.S.	North Cent.
June, 1961	15.2	15.4
May, 1961	15.7	15.9
June, 1960	14.8	15.1
Average (1950-59)	13.7	14.1
Average (June, 1950-59)	13.7	14.0

NOTE: Ratios computed at mid-month by U.S. Department of Agriculture. Ratios represent number of pounds of poultry feed equal in value to 1 lb. live farm chicken, turkey or 1 doz. eggs; pounds broiler growing mash equal to 1 lb. broiler; pounds concentrate rations equal to 1 lb. milk or butterfat; bushels of corn equal to 100 lb. hog. Increases in ratios are favorable to the feeder.

KEY TO GEOGRAPHICAL DIVISIONS

Here is a guide to the states included in the geographical divisions listed in the accompanying commodity-feed price ratios:

New England: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut.

Mid-Atlantic: New York, New Jersey, Pennsylvania.

North Atlantic: New England and Mid-Atlantic states combined.

East North Central: Ohio, Indiana, Illinois, Michigan, Wisconsin.

West North Central: Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas.

North Central: Combination of the two foregoing.

South Atlantic: Delaware, Maryland, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida.

East South Central: Kentucky, Tennessee, Alabama, Mississippi.

West South Central: Arkansas, Louisiana, Oklahoma, Texas.

South Central: Combination of the two above.

Pacific: Washington, Oregon, California.

Mountain: Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Montana.

West: Combination of the two above.

Feeds: Average Bulk Prices and Index of Weighted Prices*
(Dollars per ton)

	July 5, 1961	June 27, 1961	Change from previous week
OILSEED MEALS			
Prices at prin. mkts.:			
Soybean meal	73.90	71.45	+2.45
Cottonseed meal	64.10	63.60	+ .50
Linseed meal	64.45	60.85	+3.60
Copra cake or meal	58.50	58.50	...
Peanut meal	63.00	62.50	+ .50
Index	91.7	89.1	+2.6
ANIMAL PROTEIN FEEDS			
Prices at prin. mkts.:			
Meat meal	91.55	91.55	...
Tankage	88.25	88.25	...
Fish meal	110.75	110.75	...
Index	82.2	82.2	...
GRAIN HIGH-PROTEIN FEEDS			
Prices at prin. mkts.:			
Gluten feed and meal	46.55	46.95	— .40
Dist. dried grains	64.20	59.20	+5.00
Brewers dried grains	40.50	40.50	...
Index	76.6	75.5	+1.1
WHEAT MILLFEEDS			
Prices at prin. mkts.:			
Bran	34.85	35.30	— .45
Midds. and shorts	38.00	38.50	— .50
Index	65.8	66.7	— .9
OTHER MILLFEEDS			
Prices at prin. mkts.:			
Hominy feed	41.10	41.10	...
Rice bran	30.50	30.00	+ .50
Index	63.5	63.3	+ .2
ALFALFA MEAL			
Prices at prin. mkts.	46.05	45.95	+ .10
Index	88.6	88.5	+ .1
MOLASSES, FEEDING			
Prices at prin. mkts.	28.19	28.19	...
Index	83.9	83.9	...
ALL FEEDSTUFFS			
Index	82.6	81.4	+1.2
FEED GRAINS			
Prices at prin. mkts.:			
Corn	39.60	38.60	+1.00
Oats	45.80	45.10	+ .70
Barley	41.00	40.90	+ .10
Grain sorghums	41.80	41.80	...
Index	64.6	63.2	+1.4

*Base period of index is 1947-49.
Source: USDA.

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to news of drouth conditions in the Northwest.

Prices of oat and flax products, which advanced last week on news of drouth conditions in the Northwest, remained steady this week.

Southwest

KANSAS CITY: Ingredient prices were almost all higher for the week with the feature item for this area being soybean meal.

Soybean meal bounced up almost $4@5 from its low of a week ago; however, the higher prices met resistance from buyers at the top of the increase. Soy is still well under its recent highs and not priced unfavorably when compared to competing protein meals.

Alfalfa products and cottonseed meal were about unchanged for the week but both ingredients moved well within a narrow price range.

The millfeed market showed more life this week and prices worked up 50¢ to $1 from last week's levels. The demand for sacked bran continues strong and mixers purchased middlings in better volume this week.

FT. WORTH: Because of increased mill production, bran and shorts were 50¢ to $2 lower in this area. Protein feeds were higher. Soybean meal led the advance with $3 to $5 higher quotations than a week earlier.

Cottonseed oil meal was up $1 and hulls were scarce on a $1 to $2 advance. Linseed meal was $4 higher but very little is used in this area.

Meat and bone meal and tankage were in short supply and $2.50 up, and the hydrolyzed animal fat advanced ¼¢ lb. Dehydrated alfalfa meal was also up $1.

Other ingredients were unchanged and demand was rather slow.

West

SEATTLE: Soybean oil meal fluctuated in a narrow range, but closed virtually unchanged at $87.10.

Copra meal remains in tight supply at $70 with the maritime strike a factor. Linseed meal is off the market at present, but the demand is nil.

The meat meal market showed signs of perking up and was quoted at $1.85 per unit. Meat meal was once again in good demand but the supply is also good.

PORTLAND: Portland feed ingredient listings followed a mixed price trend during the short holiday week with trade sources here reporting that the demand is still narrow and buying is generally confined to nearby offerings.

Serious drouth conditions in northern sections of the U.S. were reflected here by a $3.50 increase in soybean meal quotes with most of the strength for 44% protein offerings, and supplies appeared limited during the week's close.

Fish meal values gained another 5¢ per protein unit as the United Kingdom entered the competition for Canadian supplies. Wheat millfeeds sold around 50¢ a ton lower as a result of a slow demand for light but adequate offerings. Dehydrated alfalfa meal listings declined $1 per ton while other feeds, including major feed grains, closed unchanged and about steady for the week.

STOCKTON, CAL.: There has been an excellent demand here for marine proteins from manufacturers of turkey and other poultry rations. This was largely responsible for a tighter supply situation.

There has also been strength in Peruvian meal as a result of the maritime strike.

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QUOTES

(Continued from page 88)

supply light; local production, 60% protein $1.85@1.90 a unit, unchanged.

Portland: Demand fair; trend higher; supply tight; $1.95 a protein unit, sacked.

HOMINY FEED

Boston: Demand slow; trend easy; supply plentiful; $46.50, down $1.

Chicago: Demand fair; trend steady; supply adequate; $38.

St. Louis: Demand fair; trend easy; supply ample; yellow $37.50, down 50¢.

Los Angeles: Demand good; trend steady; supply limited; hominy meal $52, hominy pellets $54, both unchanged.

Seattle: Demand good; trend steady; supply limited; $53, delivered carlots, sacked, unchanged.

Buffalo: Demand and supply fair; trend steady to lower; $47, Boston, off 50¢.

Kansas City: Demand fair; trend steady; supply adequate; yellow $35@35.50, down 50¢.

Cincinnati: Demand fair; trend steady; supply adequate; $40.50, down $1.50.

LINSEED OIL MEAL

Chicago: Demand good; trend strong, up $5@6; supply moderate; Minneapolis basis: solvent $56, expeller $60.50.

Ft. Worth: Demand slow; trend strong; supply scarce; 34% protein extracted $70.70, July, up $4.

San Francisco: Demand fair; supply ample; trend steady; $70, unchanged.

Minneapolis: Demand fair; supplies adequate; drouth conditions in the flax growing areas have pushed the price up $2 to a level of $57@58.

Seattle: Demand fair; trend steady; none available; 34% protein (Montana) $85, delivered carloads, sacked, unchanged.

Buffalo: Demand fair; trend higher; supply fair to poor; $56, f.o.b. Minneapolis, up $4.

Cincinnati: Demand poor; trend higher; supply adequate; new process $52.50, old process $58, Minneapolis, up $1.50.

Los Angeles: Demand light; trend steady; supply adequate; local production, July, 31% protein $71, unchanged.

Portland: Demand dull; trend steady; supply tight; 34% solvent $85, sacked.

MEAT AND BONE MEAL

Ft. Worth: Demand good; trend strong; supply short; meat and bone $95 bulk, $98.50 sacked, f.o.b. Ft. Worth, up $2.50.

San Francisco: Demand good; supply fair; trend down; $1.75 a unit of protein, unchanged.

Boston: Demand and supply steady; trend steady; $1.50 a protein unit; converted 50% $89.50; both unchanged.

Chicago: Demand fair; trend firm; supply ample; 50% protein $95, sacked.

St. Louis: Demand good; trend firm; supply adequate; 50% $90, up $1.50.

Buffalo: Demand fair; trend higher; supply extremely light; 50% meat scraps $95, f.o.b. Buffalo, up $5.

Memphis: Demand fair; trend slightly higher; supply adequate; 50% protein $92.50, without billing, up $2.50; 50% protein $95, with rail transit, up $2.

Los Angeles: Demand good; trend steady; supply limited; local production 31% protein $1.80, unchanged.

Kansas City: Demand fair; trend steady; supply ample; 50% $95, unchanged.

St. Paul: Demand good; supplies fair; price up $2 to $100@105.

Seattle: Demand fair; trend steady; supply limited; $1.80 a unit protein, ex-processing plant, sacked, unchanged.

Cincinnati: Demand excellent; trend strong; supply short; 50% meat and bone scraps $91, Cincinnati, up $2.50.

Portland: Demand fair; trend steady; supply adequate; 50% $85, sacked.

MEXICAN PHOSPHATE

Brownsville, Texas: Mexican natural ground rock, 13% phosphorus $39 sacked, bulk $2 less; 14% $43 sacked, bulk $2 less.

MILLFEED

Minneapolis: Demand fair; supplies adequate; sacked middlings $36; sacked bran $34; sacked red dog $42; bulk $5.50@6 less.

Kansas City: Demand fair; trend steady; supply adequate; sacked bran $33.50@34, up $1; sacked shorts $38.50@39, up 50¢; bulk bran $26@26.50, unchanged; bulk shorts $28.50@29, down $1.50; bulk middlings $26.50@27, unchanged.

Ft. Worth: Demand good; weaker tone with increased mill running time; supply sufficient; bran bulk $35, burlaps $40@40.50; gray shorts bulk $39, burlaps $45.50@46; bulk middlings $37, delivered Texas common points; bran down $1 to $1.50 up; bulk shorts down $2; sacked shorts down 50¢@$1; middlings down 50¢.

Chicago: Demand and supply fair; trend steady on bran and middlings, up $1@2 on red dog; standard bran $31.50, standard midds. $33, red dog $40@41.

St. Louis: Demand slow; trend easy; supply ample; sacked bran $38.25, shorts $43.25, unchanged; bulk bran $30, middlings $31, down $2.

Cincinnati: Demand poor; trend steady; supply adequate; bran $33, down $1; middlings $39, up $1.

Buffalo: Demand fair; trend irregular; supply fair to good; bran $30.50, off 50¢; middlings $35, up 50¢; red dog $40, off 50¢; all prices f.o.b. Buffalo.

Boston: Demand slow; trend easier; supply plentiful; bran $39.10, off 50¢; middlings $43.10, down 50¢.

Memphis: Demand fair; trend weak; supply ample; wheat bran $32.80, down $2; gray shorts $35.80, unchanged; standard midds $33.80, down $2.

Portland: Demand slow; trend lower; supply adequate; $38@39.

Seattle: Demand fair; trend easy; supply ample; $40, delivered, common transit points, carlots, down $1.

Los Angeles: Standard millrun $46@46.50, unchanged, demand moderate, trend steady, supply light; red bran $45@45.50, down 50¢, demand improved, trend easier, supply adequate.

San Francisco: Demand good; supply fair; trend steady; millfeed $46, red bran $46.

MOLASSES

San Francisco: Demand and supply good; trend steady; $25.75, f.o.b. cars Richmond, Cal., unchanged.

Ft. Worth: Demand fair; trend steady; supply sufficient; blackstrap 14⅛¢ gal., f.o.b. Houston; truck $31.49, delivered Ft. Worth, seller's market price on date of shipment, unchanged.

Boston: Demand and supply steady; trend steady; 16½¢ gal. in tank cars, unchanged.

St. Louis: Demand fair; trend steady; supply ample; blackstrap 14½¢ gal., tank cars, New Orleans, unchanged.

Minneapolis: Demand continues fair; supplies adequate; price firm at $35 for blackstrap, tank truck, delivered; $31 for beet; $33 for blend.

Los Angeles: Demand good; trend steady; supply adequate; $25.50, f.o.b. tank cars; $25.75, f.o.b. tank trucks.

Memphis: Demand fair; trend steady; supply ample; blackstrap 14⅛¢ gal., tank car, f.o.b. New Orleans, unchanged; $30.59 ton, delivered Memphis, truck, unchanged.

Atlanta: Demand fair; trend steady; supply limited; citrus $21, f.o.b. processing plants.

Seattle: Demand fair; trend firm; supply good; $26.75, f.o.b. Seattle, tank truck lots, unchanged.

Buffalo: Demand and supply fair; trend steady; 16½¢ gal., f.o.b. Albany, unchanged.

Kansas City: Demand fair; trend steady; supply ample; 14⅛¢ gal., New Orleans, unchanged.

Cincinnati: Demand fair; trend steady; supply adequate; 14⅛¢ gal., New Orleans, unchanged.

OAT PRODUCTS

Chicago: Demand fair; trend irregular; supply moderate; reground oat feed $9.50@10; No. 1 fine ground feeding oatmeal $70; feeding rolled oats $74.

Ft. Worth: Demand slow; trend steady; supply sufficient; 10% protein oat millfeed $40.30, sacked, unchanged; reground $20.80, sacked, unchanged.

Boston: Demand spotty; trend unsettled; supply irregular; white pulverized $53.50, down $1.50; reground oat feed $24.60, up $1.60.

St. Louis: Demand slow; trend steady; supply ample; white pulverized $42, unchanged; reground oat feed $12, unchanged.

Seattle: Demand and supply fair; trend steady; $56, delivered truck lots, 38 lb. or better, unchanged.

Minneapolis: Demand slow; supplies moderate; price steady; sacked feeding rolled $37; sacked feeding oatmeal $67; sacked pulverized $45; sacked crimped $63.50; sacked oat feed $20.

Buffalo: Demand fair to poor; trend steady; supply fair; $24.25, sacked, Boston, unchanged.

Kansas City: Demand good; trend steady to stronger; supply adequate; oat mill by-product $13@14, sacked, unchanged; feeding rolled oats $72@75, sacked, up $1@2.

Cincinnati: Demand poor; trend steady; supply adequate; pulverized white oats $43@50, unchanged.

PEANUT OIL MEAL

Atlanta: Demand fair; trend steady; supply limited; 45% $60 for solvent, $63 for expeller, f.o.b. Georgia and Alabama producing mills.

Los Angeles: Demand slow; trend steady; supply ample; $79, sacked, unchanged.

POULTRY BY-PRODUCTS

Ft. Worth: Demand good; trend steady; supply extremely scarce; $100@102.50, sacked, f.o.b. Texas plants, unchanged.

Boston: Demand active; trend strong; supply scarce; $100, sacked, nominal, unchanged.

Los Angeles: Demand good; trend steady; supply tight; $1.60 a unit of protein, sacked, unchanged.

Atlanta: Demand good; trend stronger; supply very limited; meat meal $90, f.o.b. Alabama and Georgia production points.

Memphis: Demand slow; trend barely steady; supply adequate; 55% meal $97.50, sacked, down $2.50.

RICE BY-PRODUCTS

Ft. Worth: Demand fair; trend steady; supply very scarce, mills closing down for season; rice bran, nominal $35@36, f.o.b. south Texas rice mills, sacked, unchanged; hulls $3 bulk, unchanged.

San Francisco: Demand good; supply ample; trend firm; bran $40.

Los Angeles: Demand good; trend steady; supply very limited; California production, high fat content, bran $50, sacked, unchanged.

Atlanta: Demand good; trend steady; supply short; bran $43, sacked, delivered.

Buffalo: Demand good; trend steady; supply poor; $52.60, Boston, unchanged.

SCREENINGS

Chicago: Demand slow; trend off $2@6.50; supply ample; ground grain $25; Canadian $23, sacked.

Minneapolis: Prices remained steady following last week's drouth-caused advances; unground Canadian $16.50; domestic lights $1@8, domestic mediums $10@18, domestic heavies $18@26; 15% flax screenings $37.

Los Angeles: Demand slow; trend steady; supply adequate; ground barley $35, sacked, unchanged.

Buffalo: Demand and supply fair; trend higher; ground, sacked $28.75, New York, lake and rail, up $1; bulk, unground $24.50, New York, up $1.50.

Cincinnati: Demand good; trend higher; supply tight; unground grain screenings $18@19, up $1.

SOFT PHOSPHATE
(Sacked, delivered)

Atlanta: $20.25.
Buffalo: $25.50.
Chicago: $24.96.
Cincinnati: $23.64.
Des Moines: $25.42.
Kansas City: $25.07.
Memphis: $22.38.
Minneapolis: $26.13.
Philadelphia: $24.51.
St. Louis: $24.32.

SOYBEAN OIL MEAL

Ft. Worth: Demand good; stronger tone with more mills shutting down for vacation and repair; supply sufficient; 44% $75.40 July, up $4.90; $75.90 August, up $4.40; 50% $84.40 July, up $4; $84.90 August, up $3.40.

Chicago: Demand improved; trend strong, up $4@5; supply ample; Decatur basis: 44% protein, unrestricted billing $65.50 and E.T.L. $62.50; 50% protein, unrestricted billing $73.50 and E.T.L. $68.50.

San Francisco: Demand fair; supply ample; trend down; $85.10, down $3.

Boston: Demand good; trend firmer; supply adequate; 44% $59.50@60, up $4; 50% $65.50@67, up $2.50@4.

St. Louis: Demand fair; trend strong; supply ample; 44% $65.50, basis Decatur, up $5; 50% $73, up $5.

Buffalo: Demand and supply fair; trend higher; $62, f.o.b. Decatur, up $5.50.

Seattle: Demand fair; trend firm; supply ample; $87.20, delivered carlots.

Memphis: Demand poor; trend steady; supply ample; prime 44% solvent $66.50, f.o.b. Memphis, up $3.50.

Atlanta: Demand fair; trend stronger; supply tight; 44% $73.50, delivered.

Los Angeles: Demand improved; trend firmer; supply light; $88.10@88.60, up $3@3.50.

Minneapolis: Demand and supply good; price up $2.50@3; 44% is up $2.50 to $61.50; 50% is up $3 to $67.

Cincinnati: Demand poor; trend higher; supply adequate; $65, Decatur, up $4.50.

Kansas City: Demand fair; trend stronger; supply ample; 44% solvent process $64@65, Decatur, up $4@5.

Portland: Demand slow; trend higher; supply tight; 44% $88.60, 50% $95.60.

TANKAGE

Chicago: Demand and supply fair; trend firm; 60% protein $95, sacked.

Ft. Worth: Demand good; trend strong; supply short; 60% digester $102.50, sacked, Ft. Worth, up $2.50.

Cincinnati: Demand good; trend strong; supply fair; 60% digester $92.50, Cincinnati, up $2.50.

St. Paul: Demand good; supplies fair; price up $2@4, price now $90@95.

Kansas City: Demand poor; trend steady; supply ample; 60% digester $90, unchanged.

UREA FEED COMPOUND

Woodstock, Tenn.: Minimum 42% nitrogen, 262% protein equivalent; $103 bagged, $99 bulk, delivered in all states east of and including New Mexico, Colorado, Wyoming and Montana.

LaPlatte, Neb., and South Point, Ohio: Minimum 42% nitrogen, 262% protein equivalent $95, f.o.b. bagged; $90 bulk, cars or trucks; freight equalized with nearest producing point.

Belle, W. Va.; Minimum 42% nitrogen, 262% protein equivalent $100, f.o.b. bagged; $96 bulk, cars or trucks, freight equalized with nearest producing point.

Pryor, Okla.: Minimum 42% nitrogen, 262% protein equivalent $95 bagged, $91 bulk, f.o.b. Pryor, freight equalized with nearest producing point; $100 bagged, $96 bulk, delivered in cars or trucks to New Mexico, Colorado, Wyoming, Montana and all states to the East.

VEGETABLE AND ANIMAL FAT (HYDROLYZED)

Ft. Worth: Demand good; trend steady; supply sufficient; 6¢ lb., f.o.b. north central Texas, unchanged.

Los Angeles: Demand fair; trend steady; supply limited; 6¾¢ lb.

1966

(Continued from page 1)

over-supply demands. Self-restraint is often necessary in order not to start price reactions because margins are already thin.

Evidence of the oversupply situation was presented by one manager who said seven feed mills had been built in the last 10 years to serve farmers within a 25-mile radius of one Iowa community. It is not economically possible for all to survive. Restraint, caution and sound business judgment would prevent such situations.

—Increases in farm sizes indicate that this class of farmers is seeking "full employment." These farmers are extending operations to take up their full time. Dealers have an excellent opportunity to furnish the supplies and services enabling farmers to do what they know best—to farm. "Full employment" for farmers may dictate against any appreciable trend to on-the-farm grinding and mixing, a job in which feed men should excel.

—The rate of return on investment

in facilities and labor should be 15%; 20% would be even more desirable.

—Labor costs have outrun the rate of return in recent years. An expenditure of $10,000 or more for labor-saving equipment is justified to save $4,000 paid out annually in wages.

—Relatively high costs of shipping feed grains will tend to put emphasis on utilizing more grain locally in feed, therefore more emphasis on local feed mill rather than country elevator-grain storage operations. In 1966 there will be fewer country elevators which are purely grain storage operations. There will be a shift toward stronger feed, grain and farm supply centers in county seat cities.

—Facilities operated at capacity produce the best returns on investment. Conversely, the more facilities go unused, the lower the return on investment. (In the workshop example, a $225,000 feed plant was considered too expensive for $225,000 annual feed sales.)

—Don't rely on the banker to protect you from errors in judgment in soliciting a loan for facilities. He may think a 12% return on investment is good, but if the sales volume isn't adequate, it may not be a wise loan to make.

It's a common error to think that equity financing (such as issuing stock) doesn't cost anything. It does. Actually, it is more costly than debt financing (borrowing money from the bank or other source for a set rate of interest).

In deciding where to seek financing, consider (1) cost (interest rate), (2) flexibility (can you get additional loans later?) and (3) liquidity (ability to convert into cash).

—A subject rarely discussed in retail farm supply circles for some strange reason is mergers. One manager stated that financial and facility problems might be solved by a merger of two local operations. In addition, the merged organization should be better able to serve the large-size farms.

—Consideration must be given to providing varied but related lines of agricultural supplies. But whatever the line, be in it 100%, not half-heartedly.

—Price consciousness by the farmer has been exaggerated. "When the farmer wants fertilizer, he isn't going to quibble on price. He'll be in a rush to get it, though, and that's what he wants from his dealers—promptness and eagerness to serve him," explained one dealer.

SENATE

(Continued from page 1)

soybeans from the existing list of commodities for which marketing agreements and orders could be used, but it authorized use of these instruments over other crops which are not under allotments, such as wheat, tobacco, corn and field crops of large size.

Title 1

The committee had previously killed Title 1 of the bill, which contained broad grants of authority to USDA and authorized compensatory payments and controls over production under marketing orders (and the House had also taken the same action). However, Senate leaders told this reporter that it is still possible that the administration may make a final move to reinstate the controversial Title 1 when it hits the Senate floor. At that point, the White House, with more than 70 federal judgeships yet to be allotted, may make an effort to bring reluctant followers into line.

However, the administration may be blocked since Mississippi Democratic Sen. James Eastland is chairman of the Senate Judiciary Committee, and he could hold up confirmation of judge appointments if the administration tried to force through a farm omnibus bill not to his liking. Up to this time, Sen. Eastland has voted against the administration on the farm bill.

Cooperative Provision

While the committee has failed to act on Title 4 of the omnibus bill, and this provision is being fought by proprietary trade representatives, it is expected that the Senate committee will accept this provision with insertion of qualifying language. This provision is designed to overcome obstacles to joint ventures by two or more farmer cooperatives to act jointly to control markets for farm products. This provision would upset a recent Supreme Court ruling here concerning two local milk cooperatives which attempted to restrain trade and refused to sell milk to retail outlets.

One Senate leader said he saw the point raised by the proprietary trade but he believed that the Senate committee could so qualify the final language that such permission to be granted in the final measure would protect the private trade against violations of the anti-trust laws by a joint venture of two or more farm cooperatives.

It is likely that the Senate will be unable to finish its executive sessions on the farm bill before the middle of next week.

RETIRES

(Continued from page 4)

taught vocational agriculture at Paragon (Ind.) High School. He also managed a 2,000 acre livestock farm and for four years was in the feed department of the Ohio Farm Bureau Cooperative system.

In 1934, he joined Indiana Farm Bureau Cooperative Assn. as a feed field man and after three years became head of the department.

Other new officials of the Farm Bureau Milling Co. in addition to Mr. Brownlee and Mr. Moore have been announced as follows: Secretary-treasurer, Owen Haffner, Wisconsin Farmco Service Cooperative, Madison, Wis.; assistant secretary-treasurer, Russell Paarlberg, who is general manager of Farm Bureau Milling Co., Hammond, Ind., and directors, Martin Garn, Farm Bureau Services, Inc., Lansing, Mich.; William Justice, Indiana Farm Bureau Cooperative Assn., Inc., Indianapolis, Ind., and Clifford Bass, Wisconsin Farmco Service Cooperative, Madison, Wis.

Mr. Moore, the new feed and poultry department manager for Indiana Farm Bureau Co-op, has been with the group since 1935. Since 1944, he has been assistant manager of the feed and poultry department.

WORKSHOP

(Continued from page 1)

feature, designed to help improve small mill operations.

"Speakers have been selected who are most familiar with the problems of the small mill operator," the co-chairmen said. "Many of them are actually operating small mills. They will discuss down-to-earth feed production problems and answer questions during the discussion periods."

Program Details

The program will be:

"The Small Mill's Position in the Feed Industry—Providing the Most Efficient Feed Program for the Feeder," James Frautshy, Murphy Products Co., Burlington, Wis.

"Grinding for Efficiency in Production, Feeding and Sales," Robert Hessell, Tarkio (Mo.) Pelleting Co.

"Rolling for Efficiency in Production, Feeding and Sales," Thomas Anderson, Gooch Feed Mills, Salina, Kansas.

"Mixing—Getting the Most Out of Your Mixer—Horizontal and Vertical," George Willis, S. Howes Co., Silver Creek, N.Y.

"Molasses Application for Maximum Product Desirability," Oak Smith, Wenger Mixer Mfg. Co., Sabetha, Kansas.

"Bulk Feed—Meeting the Problems of Production and Service," Robert Kellogg, Kellogg Bros. Feed & Seed, Wichita, Kansas.

"Interpreting FDA Regulations for the Small and Custom Mill," Paul Sanders, Elanco Products Co., Division of Eli Lilly & Co., Indianapolis.

"Necessity of Proven Feeding Programs and Proper Formulating for Profitable Feeding," Lloyd Buis, Lloyd Buis & Sons, Cloverdale, Ind.

"On-the-Farm Mixing vs. Local Mill Mixing," Eldon Roddis, Roddis Feed Co., Rochester, Minn.

"Operating a Grain Bank," Dr. W. S. Farris, Purdue University, Lafayette, Ind.

"Serving by Doing," Lloyd S. Larson, Feed Production School, Inc., Kansas City.

Registrations should be sent to Small Mill Workshop, Feed Production School, Inc., 20 West 9th St. Bldg., Kansaas City 5, Mo.

RATE CUT

(Continued from page 1)

Ala., but Southern Railway spokesmen said this was "just a happy circumstance. . . . The new rates have been under consideration for more than eight months, and were described by Southern as an effort to recapture for the rails the grain traffic which now moves mostly by unregulated carriers."

Objections Possible

Meanwhile, some objections are expected to be filed to the proposed rates, which would possibly delay their effective date. Trucking companies and barge lines may fight the rail reductions.

Also, some feed manufacturers have observed that the reduced rates announced by Southern may be the prelude to rate cuts by other carriers. Grain receivers are studying Southern's rate proposal to determine exactly how the proposed rail rates compare with existing rates of barge and truck lines.

Most of the grain and other feed ingredients shipped into the poultry areas of Alabama and Georgia and eastern Tennessee have been moving on river barges. When barges were tied up and shipments delayed, grain prices jumped 10-12¢ bu. and shippers said increased freight rates were responsible.

Grain, mostly corn, has been unloaded from barges at Guntersville, Ala., and Chattanooga on the Tennessee River and trucked to feed mills in Georgia and Alabama. Some shipments from midwestern markets have been diverted from the river to movement by rail.

"Improved Technology"

D. W. Brosnan, Southern's executive vice president, said the reductions are possible because of "improved railroad technology." He noted that present railroad rates are based on loading 50 tons per car and moving in single car lots, while the new rates are volume rates based on "the economies inherent in the use of the railway's giant new lightweight aluminum cars, loaded with a minimum of 90 tons per car and moving in lots of 5, 10 or 20 cars at a time."

Mr. Brosnan also remarked, "It has been reported that the South's broiler industry is being hurt because it has had to pay higher corn prices because grain was shifted from barge movement to railroad movement when the break occurred in the Wheeler Dam lock. Although these lower rates cast Southern somewhat in the role of the old-time melodrama hero, 'Hairbreadth Harry,' arriving on the scene in the nick of time to save the chickens, it is simply a fortuitous and happy circumstance that we are in a position to put these lower rates into effect at this time.

"No distinction has been made in the rate level to points reached by water, as compared to points inland from water," he said, "because we feel that Southern has an obligation to haul to off-river points on the same basis as it hauls to on-river points. The accident of location shouldn't cause an inland area to be penalized in the matter of freight rates. That's why we have extended the rates to the entire territory so that the whole area will get the benefits of modern railroad technology."

PRICES

(Continued from page 1)

ly for beef, and perhaps for pork and lamb and maybe even for broilers, turkeys and eggs.

—Although hog prices may not go higher than the current peak of about $19 cwt., Chicago, at least one economist predicts more than usual price stability over the next 12 months, mainly because producers are increasing hog numbers only moderately and because this year's spring and fall pig crops are unusually well balanced.

—Some reduction in market supplies of fed cattle is in prospect for July and August, and this should result in some price gains. Also, consumer demand improvement, reduced receipts of fed cattle and a tapering off in broiler production are expected to help beef cattle prices. Any improvement is most likely to be seen in prices for top grades. Prices for grass-type cattle and feeders are expected to decline.

—Fed lambs have gained price strength in recent weeks, but, if history repeats itself, the trend will be downward from now into the fall and early winter months.

—Broiler prices are expected to improve during July and August. However, it's likely that they will remain below prices recorded during corresponding periods last year.

—Egg prices showed seasonal advances of 4-5¢ doz. during late June, and they'll probably level off near last year's averages until fall, when prices under year-earlier levels may take over.

—August-September turkey prices are expected to be 4-5¢ less than in the same months last year. Some slight increase may occur as the marketing season progresses, but no major price gain is expected from November to December.

—Dairymen can expect modestly higher milk prices over last year, month by month, until at least April, 1962.

EXCHANGE

(Continued from page 1)

high quality animal protein, and at a cost lower than for other high quality animal foods."

He pointed out that institute staff members have met informally with members of the council and that he and Joseph O. Parker, legal counsel of the institute, have been conferring for several months on a plan whereby "the U.S. government could buy canned chicken and turkey with certificates for surplus corn and use this canned poultry in the Food for Peace programs. In addition to poultry products, further study is being given to the use of egg products in the Food for Peace program.

"The unsurpassed efficiency of the poultry and egg industry in converting feed grains into high quality protein food provides an excellent opportunity for a more complete utilization of our agricultural resources.

"Such a program would have dual benefits—it would help to alleviate our domestic feed grain problem without adversely affecting the poultry and egg industry while, at the same time, serving the objective of the Food for Peace program."

CALIFORNIA

(Continued from page 6)

turkey business. But essentially, that profit in the teed became a false profit and had to be put in a bad debt account sooner or later. So, this, too, hurried the onset of contract turkey production."

Product Control—"Some contract production programs were initiated to satisfy specific markets requiring a given number of turkeys per day of a certain weight and of high quality. The independent grower wouldn't work on this basis. If the market got high, he sold his turkeys out from under you. If they became sick and had to go to market, he didn't have a flock to replace them to you. Poults aren't available and he didn't get that late brood in.

"Many of you here today are integrated and have been for a long time. You produce hatching eggs. You produce meat turkeys. You mix your own feed. And you belong to a marketing cooperative.

"Why are you integrated? My guess is that it resulted in a more efficient operation. Your product quality was better. You saved money.

"Some of the advantages of integration to the integrator are:

"(1) His efficiency improves. Never before did a fraction of a cent a pound mean so much. Feed formulation and efficiency are carefully studied. Markets are analyzed.

"(2) The quality of the product is improved and is better controlled.

"(3) He can control his product to protect the dollar previously invested with someone else.

"However, contract growing is not the most efficient part of integration. This is less desirable than complete vertical integration. You can readily see that the independent contractor is not going to do the job for you that you will get out of a salaried employee on your own ranch. The contract grower loses his independence and his initiative. The growing risk is removed, his income is almost guaranteed, and he has a bankable deal.

"Now the remaining independent operator is placed in tight competition with large companies. He can make prompt decisions, but he often fails in planning, organizing, understanding his operation and finances. He is generally too busy to know what is going on."

EXAMPLES OF INTEGRATION—"To look at some examples of integration, we have one such as the Arkansas Valley Industries. This organization of 13 companies has acquired capital through the public sale of stock. Its staff includes a comptroller, public relations counselor, personnel director, engineer and nutritionist. It originally offered stock for sale at $7 per share. At one time it was $14. Today, I don't know what it is.

"Another type of integration could be illustrated by the Mississippi egg program of General Mills, Inc.

"(1) Each grower has two houses of 3,300 hens each.

"(2) They receive a fixed amount per month per 1,000 birds.

"(3) All houses are like peas in a pod, and all face in the same direction.

"(4) Birds are placed on an all-in, all-out basis.

"(5) They operate their own replacement program.

"(6) A specified feed mill produces feeds specifically for this operation.

"(7) Mill production and freight costs are low.

"(8) They operate their own egg processing plant.

"(9) They have their own marketing department.

"(10) There are half a million layers in production. A waiting list of 100 growers always wants to get on the program.

"(11) The local banks cooperate in financing the buildings and equipment.

"(12) There is one profit. Not a profit on the replacement program, not a profit on the layers, not a profit on the processing plant, not a profit on the brokerage of eggs, but only one end profit depending on the cost of production and the selling price of a dozen eggs.

"In the turkey industry, many growing corporations are being tried out. Most of these are horizontal type integration where one furnishes the feed mill, another has the poults, still another furnishes the processing plant, etc. This type of operation won't be too successful because each of these units will expect a profit. If not a profit, then the cost of production will be a point of debate.

"California has many combinations of integration. In this state, feed companies are the basic integrators. Some of them own ranches, own breeders, own meat turkeys grown by own employees and process where they can get a quality job at a reasonable price. Others grow everything with contract growers and buy poults from a reputable hatchery."

CONTRACT GROWING—"There are several types of growing contracts:

"(1) Fixed amount per bird or per pound with some incentive tied to mortality or to the market. Unless you hit an unusual market, your share of this is usually a dream, and you had better bank the 'sure' part of the payment!

"(2) Contract guaranteeing no loss, but all of the profit. This is a good deal for the feed company. It stands to get free labor and facilities to grow its turkeys. The grower stands to make a profit if prices of turkeys are high enough to cover the cost of production.

"(3) Contract guaranteeing maximum feed production costs per pound of meat and all of the other expenses and the eventual loss or profit is for the growers account.

"(4) Contracts paying so much per bird regardless of sex or age and with no other participation.

"There are other types of contracts and the basic points to look for in any of them are:

"(1) Cancellation provisions.

"(2) What happens in case of death, illness or a sale of the property?

"(3) Arbitration provisions.

"(4) Who makes management and marketing decisions?

"(5) How are you paid?

"(6) Are you an employee or an independent contractor?

"(7) Can either party sell or assign the contract?

"(8) What is the full extent of your liability?

"So much for contract meat production. Problems continue to exist for both parties in these programs and a lot depends on the integrity of the people doing business together."

CONTRACT HATCHING EGG PRODUCTION—"In contract hatching egg production, activity is just getting started. About 70% of our California meat crop is grown by contract operators. However, the production of hatching eggs on contract has been lagging, but it will begin to increase rapidly.

"The production of turkey hatching eggs has long been one of the most profitable of all production programs. It also has the greatest financial risk for the grower. As some of this risk is removed, the egg price will be reduced. In the meantime, many will enter into contract egg production or an integrated production program by employees of the feed company or hatchery.

"The reason is simple: Money. But not to be overlooked is quality and a dependable supply.

"You independent egg producers will find that your markets are slipping from you. They may go a little at a time, or in large blocks. Poults are not sold by poult salesmen much anymore. The grower that used to buy from 'X' hatchery is now producing meat on a contract. The poult price is too high. To bring it down, the egg price will have to come down, fertility will have to be maintained at a high level, good meat turkeys that are high egg producers will have to be kept and quality will be most important.

"I believe this next year will show you a lot less available poult market due to integrators supplying themselves."

In connection with this statement, Mr. Fernley read part of a letter written by "an important member of the turkey industry in California"—apparently a hatcheryman. This letter, he said, shows "some very forward thinking of what is to come" in poult production.

In time passed, the business represented by the writer of the letter obtained "substantial" profit from buying eggs and hatching poults. The next move, the letter said, was to poult financing, "which required a great deal of risk on our part."

About three years ago it became apparent to the anonymous hatchery that "the feed companies were the ones that would be buying the poults," and the firm adjusted its operations accordingly.

The hatcheryman said in the letter that his firm had become one of the largest hatcheries in the U.S. This growth has meant many changes, and there are more to come. "We are now in the process of setting an integrated program of our own between egg production and the hatchery," the letter said. "As it appears to us now, we will own all of the hens that produce the eggs for the hatchery. We are setting these hens up in groups of 2,000, located in various sections where we think the climate is the best for the various age groups that we want the production from. . . .

"We will still, of course, maintain our own breeding ranches for our foundation stock and experiments." So ended Mr. Fernley's quoting from the letter.

MORE ABOUT HATCHING EGGS—Mr. Fernley observed that many growers producing contract hatching eggs will be expanding their flocks. A hatching egg producer with one flock probably will have two soon. A grower with 4,000 hens per year in the past, for example, may own 6,000 instead.

"Four cents an egg is a pretty standard payment to the grower," Mr. Fernley said. "He furnishes labor, facilities, litter for nests, lights, water and egg storage. The owner furnishes everything else and takes all of the risk. The contract egg producer stands to gross $2.50 to $4 per hen depending on production. He has no monetary risk involved other than a lost labor income. With disease the way it is today, this looks like a pretty good deal. Chances for large profits are removed, but chances for loss are also removed.

"You can say, 'Well, I'm pretty well fixed with an eastern egg market, so I won't worry about the price of hatching eggs.' Don't kid yourself! This out-of-state market will become less and less available to you.

"I noticed a small article in Turkey World on the success of Iowa's CRD testing program. It said, in so many words, that all of the disease came in poults produced from eggs shipped in from other states. Parts of the Midwest and South will be in this egg production business next year. They want to improve their quality. Feed ingredient costs are less. The final meat turkey is closer to Chicago, New York and Florida."

MARKETING—Mr. Fernley commented that marketing is the most important part of any production program. And he discussed this phase at length, saying, in part:

"The nonintegrated grower is a gambler. He invests a lot of money in the production of a product for a market several months into the future with only a general idea of specification, and an optimistic guess as to the price that he will receive, if he can sell his product. Once the poults are placed, the die for production is cast. Once the breeders are selected and tested, you have little chance to turn back. Will you be able to sell your eggs?

"The U.S. per capita consumption of meat last year was 194 lb. Eighty pounds of this was beef. In the past 15 years, beef and chicken consumption has increased 22 lb. per capita; turkey only 3½ lb. Why? Turkey consumption in California is 10-12 lb. per person, and only 6½ lb. in the U.S. Why? Just a little increase in consumption could do a lot to offset the decreased prices."

Especially so in this year of heavy turkey production, he said, "we need to dig in and sell turkey. . . . We can whip this production problem if we all pull together to get more convenience foods and better (store) showcase representation for the turkey.

"Don't listen to the depressed market talk. When you should have listened was months ago. Now you have to live with it."

INTEGRATED PROGRAMS OF THE FUTURE—"Look around you," Mr. Fernley advised. "Many people are choosing up sides—breeders, growers, processors. If you choose to join one of their integrated programs, select one that best fits your own operation and circumstances. If you elect to remain independent, then integrate your own operation, keep good records so that you know your true costs and be careful."

As Mr. Fernley sees it, an ideally integrated turkey program will look like this:

"(1) Poults will be secured from breeder hens owned by the integrator and hatched in his own hatchery.

"(2) Meat turkeys will be placed on ranches owned or leased by the integrator and grown by salaried employees.

"(3) Feed will be produced in feed mills owned by the integrator and located close to the growing ranches. Chances are they will be specialty mills making only one or two kinds of feed.

"(4) Processing will be done in plants owned or controlled by the integrator.

"(5) Marketing will be done by the integrator under a quality label or custom pack. Much of it will be sold in advance on a specification basis. Service will be extremely important.

"(6) Only one profit will be made on all of these phases of production; not several as it is today.

"(7) Production costs will be decreased to the point where 19¢ toms and 22¢ hens will be profitable."

SOLD AT 7 WEEKS; CONVERSION UNDER 2

FAYETTEVILLE, ARK.—The first progeny test from mating of female lines in the 5th Arkansas random sample egg test of meat-type birds was recently completed. Labeled Test Mating 5A, it produced broiler progeny that were marketed at 7 weeks of age. The commercial entries of the test used less than 2 lb. of feed to produce a pound of liveweight.

Random sample meat phase tests are conducted by the University of Arkansas Experiment Station under sponsorship of the Arkansas Poultry Improvement Assn.

For the commercial entries, live weights at seven weeks ranged from 2.42 to 2.95 lb., with more than half of the 11 entries at around 2.8 or more lb. Feed conversions ranged from 1.91 to 1.99 lb. feed per pound of meat.

MARKETS

(Continued from page 2)

tributed to shutdowns in observance of the Independence Day holiday along with the usual small dropoff in demand occurring when harvesting operations start to get under way. Most units took care of trade needs with four day operations.

Turkey grower feeds are moving quite well and gaining in importance in mill operating schedules. Hog prices hold at a good level and hog feed sales reflect the favorable ratios. Dairy and cattle feed demand shows no improvement.

Ingredients have taken on a firmer tone and manufacturers expect prices to be slightly higher on the list issued at the end of the week.

Pacific Northwest

Oregon, Washington and Idaho formula feed trading this week appeared to be maintained with that of the previous period but was somewhat below earlier expectations.

Sales of broiler, turkey and laying hen rations continued to lead the field, while the movement of dairy and livestock feeds continued slow in front of a narrow demand. This reflected excellent pastures in most sections along with availability of new forage crops.

The regional egg-feed ratio improved for the second consecutive week when producer egg prices at Portland and other major Pacific Northwest markets advanced as much as 3 to 4¢ a dozen on all grades and sizes.

AA extra large eggs were quoted to Willamette Valley producers at 37 to 43½¢ a dozen by Portland handlers with AA large ones advancing to a new seasonal high of 36 to 41¢.

The situation also looked more favorable for Pacific Northwest livestock producers with North Portland quotations unchanged to mostly higher during the short trading period.

Northern California

Formula feed business volume remained practically the same as a week ago. Mills are reporting their usual 40 hour operations.

The hot weather has had its impact on the industry. The high temperatures tended to dry up the pastures and therefore increase the need for cattle and dairy feeds.

Feed manufacturers say that the poultry feeds are the strongest with turkey feed claiming the major part.

Southern California

Southern California has just completed its driest year in history with less than 5 in. of rainfall recorded during the past 12 months. Also this is the third consecutive year that total precipitation amounted to less than that of a normal year.

Feed demand has definitely been affected with the unseasonably warm weather throughout the area. Poultry feed demand declined considerably because of fewer birds and a lower feed consumption rate due to the heat.

Egg prices advanced 2¢ per dozen this week and poultrymen predict better local prices throughout the summer months. Most poultry ranchers disclose that earnings decreased the first half of 1961 in comparison to the previous six months. Broiler prices have improved somewhat in Los Angeles, but they still reflect a level below production costs.

Feedlot managers and owners are greatly concerned about the lack of interest among their customers. In many cases new facilities constructed to handle larger numbers of cattle this season have gone unused.

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Egg Breaking Plant

GAINESVILLE, GA.—An egg breaking plant, the first in the Southeast for Seymour Foods, Inc., Topeka, Kansas, will be erected here and is scheduled to be in operation by Nov. 1.

Four breaking machines will be installed immediately to give the plant an output of 2,500 cases a week, working one shift a day.

Seymour Foods has plants in Concordia and Ottawa, Kansas; Yankton, S.D., and a broiler plant at Decatur, Ark.

Harry A. Perry, president, said the company is moving into the Gainesville area and the Southeast because of heavy commercial baking activities now in the South.

File Arizona Articles

MESA, ARIZ.—Western Feed & Seed has filed articles of incorporation listing $1 million authorized capitalization to engage in the business of buying, selling and dealing in feed, seed, livestock and fertilizer of every kind.

Incorporators are Robert D. Biggs and Ben R. Heywood, both of Mesa.

NEW DELAWARE FIRM

DOVER, DEL.—Killen Grain Co. has filed articles of incorporation listing $100,000 authorized capitalization. Herman C. Brown of Dover is serving as the resident agent.

TOP OF THE HOPPER

(Continued from page 2)

with product liability claims. A feed company's dairy ration, it seems, stood accused of "poisoning" some cattle, and the feeder's attorney apparently had succeeded in convincing the judge that the feed had contained screenings which included some minute quantities of mustard seed. Alleged toxicity of the seed was the basis of the claim. Then there was considerable to do among the courtroom participants about the alleged toxicity, particularly in relation to the quantity of seed that could have been consumed by the animals.

At this point the judge interrupted the proceedings and urged the contestants and witnesses to look out the window, where he had been gazing during the arguments. He called their attention to a herd of cattle standing knee-deep in wild mustard, then ruled in favor of the feed company.

DEMAND FOR MEAT in Japan has become so strong that some economists are predicting that it will increase to five times its present level in the next 10 years. Already some spectacular increases in livestock production have developed as a result of this demand. The Food and Agriculture Organization of the United Nations reports that cattle numbers were up from 2.4 million in 1952 to 3.3 million in 1959. There are now some 2 million dairy cows—more than 10 times the number before World War II. Since 1952, the number of pigs tripled to total 1.7 million in 1959. Chicken numbers in the same period climbed from 20 million to 50 million.

In 10 years it is expected that the value of livestock production will represent one third of total agricultural production and be equal in value to rice production. Japanese fishing was restricted after the war, and at the same time contacts with western people and western groceries influenced the food interests of large numbers of city-dwellers.

More of the farm population is being attracted to industrial jobs, and pressure to form larger, mechanized farms is expected to develop. At present heavy emphasis is being placed on pasture improvement on uplands not suited to grain production but, with more intensive farming of the plains and valleys in sight, more production of livestock in these areas is probable, too.

Exclusive Franchise

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No matter how good your present program is, your customers must make money if you are going to be permanently successful. To do this in the feed business, a feed dealer must have not only a good feed, but also his customers must have good breeding stock, good equipment and good housing. Eventually someone will sell all four in your area—it might as well be you!

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